INTEL-FS Spiral 2::NATO::JISR::Staff::IRMCM::Task::TaskCTM - Owned Attributes				
Attribute Name	**Type Name**	**Defining Class**	**Mltplcty**	**Description**
AnalystComment	String	IntelligenceInformationEntity	0..1	Comment on the product. The Comment field will identify analyst comments regarding the implications of the information and other assessments. [IFAS1-SOP]
AssignedAt	DateTimeZuluType	TaskCTM	0..1	
BPs	BusinessProcess	IntelligenceInformationEntity	0..*	
BusinessProcess	BusinessProcess	ChoreographyTaskMessage	1..1	
CTM1	ChoreographyTaskMessage	ChoreographyTaskMessage	1..1	
CTM2	ChoreographyTaskMessage	ChoreographyTaskMessage	1..1	
DTG	DateTimeZuluType	ChoreographyTaskMessage	0..1	
Description	String	IntelligenceInformationEntity	0..1	
ExtensibleType	ExtensibleTypeGroup	Entity	0..1	
ID	Integer	Entity	0..1	
IIEAttributes	IIEAttribute	IntelligenceInformationEntity	0..*	
IdentifierUUID	String	Entity	0..1	
Key	String	Entity	1..1	
Metadata	StaffMetadata	StaffIIE	1..1	
Name	String	Entity	0..1	
SP1_GeoEntities	Geometry	IntelligenceInformationEntity	0..*	

INTEL-FS Spiral 2::NATO::JISR::Staff::IRMCM::Task::TaskCTM - Owned Attributes				
Attribute Name	**Type Name**	**Defining Class**	**Mltplcty**	**Description**
Summary	String	IntelligenceInformationEntity	0..1	An account of the content of the resource, including abstracts in the case of document-like objects or content descriptions in the case of visual resources. It shall be in English language. [IPIWG-4.20] Summary of the product. The Summary field will summarise the latest known information about the BSO. When pre-populating a BSR from an earlier BSR, old and irrelevant text will be deleted/updated. [IFAS1-SOP]
Task	Task	TaskCTM	1..1	

767	**Task_Task** INTEL-FS Spiral 2::NATO::JISR::Staff::IRMCM::Task::Task_Task Type: **<AssociationClass>**	platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#_Ie26YKczEeqev_rkRTef_A

INTEL-FS Spiral 2::NATO::JISR::Staff::IRMCM::Task::Task_Task - Owned Attributes				
Attribute Name	**Type Name**	**Defining Class**	**Mltplcty**	**Description**
AnalystComment	String	IntelligenceInformationEntity	0..1	Comment on the product. The Comment field will identify analyst comments regarding the implications of the information and other assessments. [IFAS1-SOP]
BPs	BusinessProcess	IntelligenceInformationEntity	0..*	
CXP	CollectionExploitationPlan	Task_Task	0..*	
Comment	string	Task_Task	0..1	
Description	String	IntelligenceInformationEntity	0..1	
ExtensibleType	ExtensibleTypeGroup	Entity	0..1	
ID	Integer	Entity	0..1	
IIEAttributes	IIEAttribute	IntelligenceInformationEntity	0..*	
IdentifierUUID	String	Entity	0..1	
Key	String	Entity	1..1	
Name	String	Entity	0..1	
RelationDirectionType	RelationDirectionType	IIE_IIE	0..1	
SP1_EndDTG	DateTimeZuluType	IIE_IIE	0..1	
SP1_GeoEntities	Geometry	IntelligenceInformationEntity	0..*	
SP1_StartDTG	DateTimeZuluType	IIE_IIE	0..1	
StaffIIE1	StaffIIE	StaffIIE_StaffIIE	0..*	
StaffIIE2	StaffIIE	StaffIIE_StaffIIE	0..*	
StaffMetadata	StaffMetadata	StaffIIE_StaffIIE	1..1	
Strength	StrengthType	IIE_IIE	0..1	

INTEL-FS Spiral 2::NATO::JISR::Staff::IRMCM::Task::Task_Task - Owned Attributes				
Attribute Name	**Type Name**	**Defining Class**	**Mltplcty**	**Description**
Summary	String	IntelligenceInformationEntity	0..1	An account of the content of the resource, including abstracts in the case of document-like objects or content descriptions in the case of visual resources. It shall be in English language. [IPIWG-4.20] Summary of the product. The Summary field will summarise the latest known information about the BSO. When pre-populating a BSR from an earlier BSR, old and irrelevant text will be deleted/updated. [IFAS1-SOP]
Task1	Task	Task_Task	0..*	
Task2	Task	Task_Task	0..*	

768	**TaskedAssetReasonAndStatus** INTEL-FS Spiral 2::NATO::JISR::Staff::IRMCM::Task::TaskedAssetReasonAndStatus Type: **<Class>**	platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#_-JLwFQ65EeuBob5VA26Ilw

INTEL-FS Spiral 2::NATO::JISR::Staff::IRMCM::Task::TaskedAssetReasonAndStatus - Owned Attributes				
Attribute Name	**Type Name**	**Defining Class**	**Mltplcty**	**Description**
AnalystComment	String	IntelligenceInformationEntity	0..1	Comment on the product. The Comment field will identify analyst comments regarding the implications of the information and other assessments. [IFAS1-SOP]
AssignedAt	DateTimeZuluType	TaskCTM	0..1	
BPs	BusinessProcess	IntelligenceInformationEntity	0..*	
BusinessProcess	BusinessProcess	ChoreographyTaskMessage	1..1	
CTM1	ChoreographyTaskMessage	ChoreographyTaskMessage	1..1	
CTM2	ChoreographyTaskMessage	ChoreographyTaskMessage	1..1	
DTG	DateTimeZuluType	ChoreographyTaskMessage	0..1	
Description	String	IntelligenceInformationEntity	0..1	
ExtensibleType	ExtensibleTypeGroup	Entity	0..1	
ID	Integer	Entity	0..1	
IIEAttributes	IIEAttribute	IntelligenceInformationEntity	0..*	
IdentifierUUID	String	Entity	0..1	
Key	String	Entity	1..1	
Metadata	StaffMetadata	StaffIIE	1..1	
Name	String	Entity	0..1	
SP1_GeoEntities	Geometry	IntelligenceInformationEntity	0..*	

INTEL-FS Spiral 2::NATO::JISR::Staff::IRMCM::Task::TaskedAssetReasonAndStatus - Owned Attributes				
Attribute Name	**Type Name**	**Defining Class**	**Mltplcty**	**Description**
Summary	String	IntelligenceInformationEntity	0..1	An account of the content of the resource, including abstracts in the case of document-like objects or content descriptions in the case of visual resources. It shall be in English language. [IPIWG-4.20] Summary of the product. The Summary field will summarise the latest known information about the BSO. When pre-populating a BSR from an earlier BSR, old and irrelevant text will be deleted/updated. [IFAS1-SOP]
Task	Task	TaskCTM	1..1	
TaskedAssetReasonAndStatusType	TaskedAssetReasonAndStatusType	TaskedAssetReasonAndStatus	0..1	

769	**TaskingUnitReasonAndStatus** INTEL-FS Spiral 2::NATO::JISR::Staff::IRMCM::Task::TaskingUnitReasonAndStatus Type: **<Class>**	platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#_-JLwEA65EeuBob5VA26Ilw

INTEL-FS Spiral 2::NATO::JISR::Staff::IRMCM::Task::TaskingUnitReasonAndStatus - Owned Attributes				
Attribute Name	**Type Name**	**Defining Class**	**Mltplcty**	**Description**
AnalystComment	String	IntelligenceInformationEntity	0..1	Comment on the product. The Comment field will identify analyst comments regarding the implications of the information and other assessments. [IFAS1-SOP]
AssignedAt	DateTimeZuluType	TaskCTM	0..1	
BPs	BusinessProcess	IntelligenceInformationEntity	0..*	
BusinessProcess	BusinessProcess	ChoreographyTaskMessage	1..1	
CTM1	ChoreographyTaskMessage	ChoreographyTaskMessage	1..1	
CTM2	ChoreographyTaskMessage	ChoreographyTaskMessage	1..1	
DTG	DateTimeZuluType	ChoreographyTaskMessage	0..1	
Description	String	IntelligenceInformationEntity	0..1	
ExtensibleType	ExtensibleTypeGroup	Entity	0..1	
ID	Integer	Entity	0..1	
IIEAttributes	IIEAttribute	IntelligenceInformationEntity	0..*	
IdentifierUUID	String	Entity	0..1	
Key	String	Entity	1..1	
Metadata	StaffMetadata	StaffIIE	1..1	
Name	String	Entity	0..1	
SP1_GeoEntities	Geometry	IntelligenceInformationEntity	0..*	

INTEL-FS Spiral 2::NATO::JISR::Staff::IRMCM::Task::TaskingUnitReasonAndStatus - Owned Attributes				
Attribute Name	**Type Name**	**Defining Class**	**Mltplcty**	**Description**
Summary	String	IntelligenceInformationEntity	0..1	An account of the content of the resource, including abstracts in the case of document-like objects or content descriptions in the case of visual resources. It shall be in English language. [IPIWG-4.20] Summary of the product. The Summary field will summarise the latest known information about the BSO. When pre-populating a BSR from an earlier BSR, old and irrelevant text will be deleted/updated. [IFAS1-SOP]
Task	Task	TaskCTM	1..1	
TaskingUnitReasonAndStatusType	TaskingUnitReasonAndStatusType	TaskingUnitReasonAndStatus	0..1	

770	**ThreatLauncher** INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Facility::BallisticMissile::ThreatLauncher Type: **<Class>**	platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#_ut3i25S0EeyQl-341BO9AA

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Facility::BallisticMissile::ThreatLauncher - Owned Attributes

Attribute Name	Type Name	Defining Class	Mltplcty	Description
LauncherCount	Integer	ThreatLauncher	0..1	
LauncherPlatformTypeCode	LaunchPlatformTypeCode	ThreatLauncher	0..1	

771	**ThreatMissile** INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Facility::BallisticMissile::ThreatMissile Type: **<Class>**	platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#_ut3izpS0EeyQl-341BO9AA

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Facility::BallisticMissile::ThreatMissile - Owned Attributes

Attribute Name	Type Name	Defining Class	Mltplcty	Description
CanBeAdoptedByThreatMissile	PossibleTrajectoryType	ThreatMissile	0..*	
CanBeCarriedByThreatMissile	PossibleWarheadType	ThreatMissile	0..*	
MissileCount	Integer	ThreatMissile	0..1	

772	**ThreatRangeTypeCode** INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Materiel::Equipment::BallisticMissile::ThreatRangeTypeCode Type: **<Enumeration>**	platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#_1bzcgPikEemkcIoqyiQteg

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Materiel::Equipment::BallisticMissile::ThreatRangeTypeCode - Owned Enumeration Literals

Name	Short Name	Value
LRBM		
MRBM		
SRBM		
Undefined		
Results truncated to first 20 rows...		

773	**Thrust** INTEL-FS Spiral 2::NATO::Datatypes::Thrust Type: **<DataType>**	Currently not used in Spiral 2 but was introduced to support legacy aspects of Ballistic Missile Historic Firing Events platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#_8ZL54AvLEeuLxPWg5VIrUQ

INTEL-FS Spiral 2::NATO::Datatypes::Thrust - Owned Attributes

Attribute Name	Type Name	Defining Class	Mltplcty	Description
Value	UnlimitedNatural		0..1	

774	**TrajectoryType** INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Materiel::Equipment::BallisticMissile::TrajectoryType Type: **<Enumeration>**	platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#_2MSkoPisEemkcIoqyiQteg

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Materiel::Equipment::BallisticMissile::TrajectoryType - Owned Enumeration Literals

Name	Short Name	Value
CUTTHRUST		
DEPRESSED		
LOFTED		
MINIMUMENERGY		
SHAPED		
Undefined		

Results truncated to first 20 rows...

775	**TransportFacility** INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Facility::TransportFacility Type: **<Class>**	A facility that is used to support transport functions.[MIM-5.1]. platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#_qkhvFYpgEeysatGy543LrA

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Facility::TransportFacility - Owned Attributes				
Attribute Name	**Type Name**	**Defining Class**	**Mltplcty**	**Description**
AnalystComment	String	IntelligenceInformationEntity	0..1	Comment on the product. The Comment field will identify analyst comments regarding the implications of the information and other assessments. [IFAS1-SOP]
BPs	BusinessProcess	IntelligenceInformationEntity	0..*	
CandidateTarget	CandidateTarget	Facility	0..*	
Description	String	IntelligenceInformationEntity	0..1	
ExtensibleType	ExtensibleTypeGroup	Entity	0..1	
ID	Integer	Entity	0..1	
IIEAttributes	IIEAttribute	IntelligenceInformationEntity	0..*	
IdentifierUUID	String	Entity	0..1	
Key	String	Entity	1..1	
Metadata	BattlespaceMetadata	BattlespaceIIE	1..1	
Name	String	Entity	0..1	
SP1_GeoEntities	Geometry	IntelligenceInformationEntity	0..*	
SP1_ICAOLocationId	Integer	TransportFacility	0..1	
StatusReports	FacilityStatusReport	Facility	1..*	
Summary	String	IntelligenceInformationEntity	0..1	An account of the content of the resource, including abstracts in the case of document-like objects or content descriptions in the case of visual resources. It shall be in English language. [IPIWG-4.20] Summary of the product. The Summary field will summarise the latest known information about the BSO. When pre-populating a BSR from an earlier BSR, old and irrelevant text will be deleted/updated. [IFAS1-SOP]

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Facility::TransportFacility - Owned Attributes				
Attribute Name	**Type Name**	**Defining Class**	**Mltplcty**	**Description**
Target	Target	Facility	0..*	
TransportFacilityCategoryCode	TransportFacilityCategoryCode	TransportFacility	1..1	

776	**TransportFacilityCategoryCode** INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Facility::TransportFacilityCategoryCode Type: **<Enumeration>**	Category Codes class of Transport Facility generated by Spiral 2 from [MIM-5.1] platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#_skuvMJJWEeybR8MjY-oHwA

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Facility::TransportFacilityCategoryCode - Owned Enumeration Literals		
Name	**Short Name**	**Value**
AirTransportFacility		
AirTransportFacility - Airfield		
AirTransportFacility - AirportOrAirbase		
AirTransportFacility - Apron		
AirTransportFacility - Helipad		
AirTransportFacility - Heliport		
AirTransportFacility - Runway		
GeneralTransportFacility		
GeneralTransportFacility - ControlTower		
GeneralTransportFacility - CrossingOrLevelCrossing		
GeneralTransportFacility - FreightTerminal		
GeneralTransportFacility - LoadingPlatform		
GeneralTransportFacility - NavigationRadarSite		
GeneralTransportFacility - PassengerTerminal		
GeneralTransportFacility - Pipeline		
GeneralTransportFacility - PumpingStation		
GeneralTransportFacility - TransloadingFacility		
GeneralTransportFacility - TransportationStation		
GroundTransportFacility		
GroundTransportFacility - Bridge		
Results truncated to first 20 rows...		

777	**TransportationType** INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Facility::TransportationType Type: **<Enumeration>**	platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#_nS1gqJS5EeyQl-341BO9AA

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Facility::TransportationType - Owned Enumeration Literals

Name	Short Name	Value
HF		Harbour Facilities (Direct Access)
IW		Inland Warterways (Direct Access)
NO		None
O		Other
PB		Probably Exist
RA		Rail Accessable (8 Kms)
RD		Road Served
RS		Rail Spur Available
U		Unknown
Undefined		
X		Not Applicable
Z		Inconclusive Analysis

Results truncated to first 20 rows...

778	**UnclassifiedVesselTECHINT** INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Materiel::Equipment::Vessel::UnclassifiedVesselTECHINT Type: **<Class>**	A ship, Vessel or craft that is not classified as surface or subsurface vessel.[MIM-5.1]. platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#_SnMwp5JZEeybR8MjY-oHwA

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Materiel::Equipment::Vessel::UnclassifiedVesselTECHINT - Owned Attributes				
Attribute Name	**Type Name**	**Defining Class**	**Mltplcty**	**Description**
AnalystComment	String	IntelligenceInformationEntity	0..1	Comment on the product. The Comment field will identify analyst comments regarding the implications of the information and other assessments. [IFAS1-SOP]
BPs	BusinessProcess	IntelligenceInformationEntity	0..*	
Category	EquipmentCategoryType	TECHINT	0..1	
CommonName	String	TECHINT	0..1	
CountryOfOrigin	SP1_CountryCode	TECHINT	0..1	
Description	String	IntelligenceInformationEntity	0..1	
Equipment	Equipment	TECHINT	0..*	
ExtensibleType	ExtensibleTypeGroup	Entity	0..1	
FullModel	String	TECHINT	0..1	
ID	Integer	Entity	0..1	
IIEAttributes	IIEAttribute	IntelligenceInformationEntity	0..*	
IdentifierUUID	String	Entity	0..1	
Key	String	Entity	1..1	
Metadata	BattlespaceMetadata	BattlespaceIIE	1..1	
Model	String	TECHINT	0..1	
Name	String	Entity	0..1	
SP1_EquipmentTypeType	SP1_EquipmentTypeType	TECHINT	0..1	
SP1_GeoEntities	Geometry	IntelligenceInformationEntity	0..*	
SP2_EquipmentTypeType	SP2_EquipmentType	TECHINT	0..1	
StatusReports	VesselTECHINTStatusReport	VesselTECHINT	1..*	

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Materiel::Equipment::Vessel::UnclassifiedVesselTECHINT - Owned Attributes				
Attribute Name	**Type Name**	**Defining Class**	**Mltplcty**	**Description**
Summary	String	IntelligenceInformationEntity	0..1	An account of the content of the resource, including abstracts in the case of document-like objects or content descriptions in the case of visual resources. It shall be in English language. [IPIWG-4.20] Summary of the product. The Summary field will summarise the latest known information about the BSO. When pre-populating a BSR from an earlier BSR, old and irrelevant text will be deleted/updated. [IFAS1-SOP]
TECHINTAttributes	TECHINTAttribute	TECHINT	0..*	

779	**UndergroundType** INTEL-FS Spiral 2::NATO::JISR::Staff::Target::SP1_Target::UndergroundType Type: **<Enumeration>**	platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#_CpIxZBUvEeuBSdMjVejhEA

INTEL-FS Spiral 2::NATO::JISR::Staff::Target::SP1_Target::UndergroundType - Owned Enumeration Literals

Name	Short Name	Value
F		Full Underground
H		Half Underground
NU		Not Underground
UN		Unknown
Undefined		
Results truncated to first 20 rows...		

780	**Unit** INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Actor::Organisation::Unit::Unit Type: **<Class>**	A military element whose structure is prescribed by a competent authority. 1996.01.09 [AAP-06] platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#_I_WfUIpMEeysatGy543LrA

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Actor::Organisation::Unit::Unit - Owned Attributes				
Attribute Name	**Type Name**	**Defining Class**	**Mltplcty**	**Description**
AnalystComment	String	IntelligenceInformationEntity	0..1	Comment on the product. The Comment field will identify analyst comments regarding the implications of the information and other assessments. [IFAS1-SOP]
BPs	BusinessProcess	IntelligenceInformationEntity	0..*	
CandidateTarget	CandidateTarget	Unit	0..*	
CentreOfGravity	CentreOfGravity	Actor	0..1	
Description	String	IntelligenceInformationEntity	0..1	
ExtensibleType	ExtensibleTypeGroup	Entity	0..1	
GovernmentOrganisationCategoryCode	GovernmentOrganisationCategoryCode	GovernmentOrganisation	0..1	
ID	Integer	Entity	0..1	
IIEAttributes	IIEAttribute	IntelligenceInformationEntity	0..*	
IdentifierUUID	String	Entity	0..1	
Key	String	Entity	1..1	
MIP_mainActivityCode	MainActivityCode	GovernmentOrganisation	0..1	
Metadata	BattlespaceMetadata	BattlespaceIIE	1..1	
MilitaryOrganisationStatusReport	MilitaryOrganisationStatusReport	MilitaryOrganisation	1..*	
Name	String	Entity	0..1	
OrganisationCategoryCode	OrganisationCategoryCode	Organisation	0..1	
SP1_GeoEntities	Geometry	IntelligenceInformationEntity	0..*	
StatusReports	UnitStatusReport	Unit	1..*	

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Actor::Organisation::Unit::Unit - Owned Attributes				
Attribute Name	**Type Name**	**Defining Class**	**Mltplcty**	**Description**
Summary	String	IntelligenceInformationEntity	0..1	An account of the content of the resource, including abstracts in the case of document-like objects or content descriptions in the case of visual resources. It shall be in English language. [IPIWG-4.20] Summary of the product. The Summary field will summarise the latest known information about the BSO. When pre-populating a BSR from an earlier BSR, old and irrelevant text will be deleted/updated. [IFAS1-SOP]
Target	Target	Unit	0..*	
UnitCategoryCode	UnitCategoryCode	Unit	1..1	

781	**UnitAttribute** INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Actor::Organisation::Unit::UnitAttribute Type: **<DataType>**	Unit Attribute is an extension point for Unit BSO.[IFAS-SP2] platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#_J9JIY5P3EeyQl-341BO9AA

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Actor::Organisation::Unit::UnitAttribute - Owned Attributes

Attribute Name	Type Name	Defining Class	Mltplcty	Description
AttrbuteValue	String		0..1	
Confidence	Confidence		0..1	
IntelligenceInformationNecessity	IntelligenceInformationNecessity		0..1	
UnitAttributeEnumType	UnitAttributeEnumType		0..1	
UnitAttributeTypeEnumType	UnitAttributeTypeEnumType		0..1	

782	**UnitAttributeEnumType** INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Actor::Organisation::Unit::UnitAttributeEnumType Type: **<Enumeration>**	platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#_J8veypP3EeyQl-341BO9AA

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Actor::Organisation::Unit::UnitAttributeEnumType - Owned Enumeration Literals

Name	Short Name	Value
Undefined		
Results truncated to first 20 rows...		

783	**UnitAttributeTypeEnumType** INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Actor::Organisation::Unit::UnitAttributeTypeEnumType Type: **<Enumeration>**	platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#_J82LsJP3EeyQl-341BO9AA

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Actor::Organisation::Unit::UnitAttributeTypeEnumType - Owned Enumeration Literals

Name	Short Name	Value
Undefined		
Results truncated to first 20 rows...		

784	**UnitCategory** INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Actor::Organisation::Unit::UnitCategory Type: **<Enumeration>**	platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#_J82LsZP3EeyQl-341BO9AA

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Actor::Organisation::Unit::UnitCategory - Owned Enumeration Literals		
Name	**Short Name**	**Value**
CIV-POL		CIV-POL
CMB		CMB
COAST GUARD		COAST GUARD
COI		COI
COMBAT		COMBAT
CUSTOMS		CUSTOMS
HQ		HQ
INTELLIGENCE COLLECTION		INTELLIGENCE COLLECTION
LOG		LOG
MIL-OBS		MIL-OBS
MIL-POL		MIL-POL
NAVAL		NAVAL
NKN		Not known
NOS		Not otherwise specified
OTHER		OTHER
RES		RES
SPT/CMB		SPT/CMB
SPT/SERV		SPT/SERV
SUP		SUP
SUP/CMB		SUP/CMB
Results truncated to first 20 rows...		

785	**UnitCategoryCode** INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Actor::Organisation::Unit::UnitCategoryCode Type: **<Enumeration>**	platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#_ORkfYJMqEeyQl-341BO9AA

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Actor::Organisation::Unit::UnitCategoryCode - Owned Enumeration Literals		
Name	**Short Name**	**Value**
CombatServiceSupportUnit		
CombatServiceSupportUnit - AdministrativeUnit		
CombatServiceSupportUnit - AdministrativeUnit - OtherAdministrativeUnit		
CombatServiceSupportUnit - AdministrativeUnit - OtherAdministrativeUnit - FinanceUnit		
CombatServiceSupportUnit - AdministrativeUnit - OtherAdministrativeUnit - LabourUnit		
CombatServiceSupportUnit - AdministrativeUnit - OtherAdministrativeUnit - LegalServicesUnit		
CombatServiceSupportUnit - AdministrativeUnit - OtherAdministrativeUnit - MoraleOrWelfareOrRecreationUnit		
CombatServiceSupportUnit - AdministrativeUnit - OtherAdministrativeUnit - MortuaryOrGravesRegistryUnit		
CombatServiceSupportUnit - AdministrativeUnit - OtherAdministrativeUnit - PersonnelServicesUnit		
CombatServiceSupportUnit - AdministrativeUnit - OtherAdministrativeUnit - PostalUnit		
CombatServiceSupportUnit - AdministrativeUnit - OtherAdministrativeUnit - QuartermasterUnit		
CombatServiceSupportUnit - AdministrativeUnit - OtherAdministrativeUnit - ReligiousOrChaplainUnit		
CombatServiceSupportUnit - AdministrativeUnit - OtherAdministrativeUnit - ReplacementHoldingUnit		
CombatServiceSupportUnit - AdministrativeUnit - PublicAffairsUnit		
CombatServiceSupportUnit - AdministrativeUnit - PublicAffairsUnit - BroadcastPublicAffairsUnit		

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Actor::Organisation::Unit::UnitCategoryCode - Owned Enumeration Literals		
Name	**Short Name**	**Value**
CombatServiceSupportUnit - AdministrativeUnit - PublicAffairsUnit - JointInformationPublicAffairsUnit		
CombatServiceSupportUnit - CombatServiceSupportAviationUnit		
CombatServiceSupportUnit - CombatServiceSupportAviationUnit - MedicalEvacuationAviationUnit		
CombatServiceSupportUnit - CombatServiceSupportAviationUnit - RefuelAviationUnit		
CombatServiceSupportUnit - CombatServiceSupportAviationUnit - UtilityAviationUnit		
Results truncated to first 20 rows...		

786	**UnitEquipmentLine** INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Actor::Organisation::Unit::UnitEquipmentLine Type: **<Class>**	platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#_J8ZfwJP3EeyQl-341BO9AA

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Actor::Organisation::Unit::UnitEquipmentLine - Owned Attributes				
Attribute Name	**Type Name**	**Defining Class**	**Mltplcty**	**Description**
AnalystComment	String	IntelligenceInformationEntity	0..1	Comment on the product. The Comment field will identify analyst comments regarding the implications of the information and other assessments. [IFAS1-SOP]
BPs	BusinessProcess	IntelligenceInformationEntity	0..*	
CandidateTarget	CandidateTarget	Equipment	0..*	
Description	String	IntelligenceInformationEntity	0..1	
EvaluationCode	EquipmentEvaluationType	EquipmentLine	0..1	
ExtensibleType	ExtensibleTypeGroup	Entity	0..1	
Facility	Facility	UnitEquipmentLine	0..1	
ID	Integer	Entity	0..1	
IIEAttributes	IIEAttribute	IntelligenceInformationEntity	0..*	
IdentifierUUID	String	Entity	0..1	
Key	String	Entity	1..1	
Metadata	BattlespaceMetadata	BattlespaceIIE	1..1	
Name	String	Entity	0..1	
Nation	SP1_CountryCode	EquipmentLine	0..1	
Quantity	Integer	EquipmentLine	0..1	
ReportableItemIdentifier	String	Materiel	0..1	
SP1_GeoEntities	Geometry	IntelligenceInformationEntity	0..*	
SerialNumberIdentifier	String	Materiel	0..1	
StatusReport	UnitStatusReport	UnitEquipmentLine	1..1	
StatusReports	EquipmentStatusReport	Equipment	1..*	

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Actor::Organisation::Unit::UnitEquipmentLine - Owned Attributes				
Attribute Name	**Type Name**	**Defining Class**	**Mltplcty**	**Description**
Summary	String	IntelligenceInformationEntity	0..1	An account of the content of the resource, including abstracts in the case of document-like objects or content descriptions in the case of visual resources. It shall be in English language. [IPIWG-4.20] Summary of the product. The Summary field will summarise the latest known information about the BSO. When pre-populating a BSR from an earlier BSR, old and irrelevant text will be deleted/updated. [IFAS1-SOP]
TECHINT	TECHINT	Equipment	1..1	Type of all (non-expendable) items needed to outfit/equip an individual or unit. [AIDM Version 3/ BICC/ INTEL-FS Spiral 1]
Target	Target	Equipment	0..*	
TrainingEquipment	Boolean	EquipmentLine	0..1	

787	**UnitEquipmentRelationshipCategoryCode** INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Actor::Organisation::Unit::UnitEquipmentRelationshipCategoryCode Type: **<Enumeration>**	Unit to equipment relationship type. The Unit to Equipment relationship type indicates the nature of the association between the a Unit and an Equipment. [P0042] [AIDM Version 3/ BICC/ INTEL-FS Spiral 1] platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#_1d7920398cf24d07b0591b3eb17fda2b

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Actor::Organisation::Unit::UnitEquipmentRelationshipCategoryCode - Owned Enumeration Literals

Name	Short Name	Value
ALLT		Allocated To
BELT		Belongs To
CONT		Connected To/with
INPR		In Possession Of
OPRF		Operates From
TBD		TBD
USBY		Used By
Undefined		
Results truncated to first 20 rows...		

788	**UnitOfLinMeasurementFeetYardsCentimetresOrMetresType** INTEL-FS Spiral 2::NATO::Datatypes::UnitOfLinMeasurementFeetYardsCentimetresOrMetresType Type: **<Class>**	UNIT OF LIN. MEASUREMENT, FEET, YARDS, CENTIMETRES OR METRES10081021.012VariableStringIndividual platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#_uqNdEIjWEeyic-Bak-igaQ

INTEL-FS Spiral 2::NATO::Datatypes::UnitOfLinMeasurementFeetYardsCentimetresOrMetresType - Owned Attributes

Attribute Name	Type Name	Defining Class	Mltplcty	Description
CM	UnitOfLinMeasurementFeetYardsCentimetresOrMetresType	UnitOfLinMeasurementFeetYardsCentimetresOrMetresType	1..1	
FT	UnitOfLinMeasurementFeetYardsCentimetresOrMetresType	UnitOfLinMeasurementFeetYardsCentimetresOrMetresType	1..1	
M	UnitOfLinMeasurementFeetYardsCentimetresOrMetresType	UnitOfLinMeasurementFeetYardsCentimetresOrMetresType	1..1	
YD	UnitOfLinMeasurementFeetYardsCentimetresOrMetresType	UnitOfLinMeasurementFeetYardsCentimetresOrMetresType	1..1	

789	**UnitOfLinearMeasurementMKmNmType** INTEL-FS Spiral 2::NATO::Datatypes::UnitOfLinearMeasurementMKmNmType Type: **<Class>**	UNIT OF LINEAR MEASUREMENT, METRES, KILOMETRES, OR NAUTICAL MILES. platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#_hQMH8IjWEeyic-Bak-igaQ

INTEL-FS Spiral 2::NATO::Datatypes::UnitOfLinearMeasurementMKmNmType - Owned Attributes

Attribute Name	Type Name	Defining Class	Mltplcty	Description
KM	UnitOfLinearMeasurementMKmNmType	UnitOfLinearMeasurementMKmNmType	1..1	
M	UnitOfLinearMeasurementMKmNmType	UnitOfLinearMeasurementMKmNmType	1..1	
NM	UnitOfLinearMeasurementMKmNmType	UnitOfLinearMeasurementMKmNmType	1..1	

790	**UnitOfLinearMeasurementType** INTEL-FS Spiral 2::NATO::Datatypes::UnitOfLinearMeasurementType Type: **<Class>**	UNIT OF LINEAR MEASUREMENT100841.012VariableStringIndividual platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#_oi5gkIjWEeyic-Bak-igaQ

INTEL-FS Spiral 2::NATO::Datatypes::UnitOfLinearMeasurementType - Owned Attributes

Attribute Name	Type Name	Defining Class	Mltplcty	Description
CM	UnitOfLinearMeasurementType	UnitOfLinearMeasurementType	1..1	
FT	UnitOfLinearMeasurementType	UnitOfLinearMeasurementType	1..1	
HF	UnitOfLinearMeasurementType	UnitOfLinearMeasurementType	1..1	
HM	UnitOfLinearMeasurementType	UnitOfLinearMeasurementType	1..1	
IN	UnitOfLinearMeasurementType	UnitOfLinearMeasurementType	1..1	
KF	UnitOfLinearMeasurementType	UnitOfLinearMeasurementType	1..1	
KM	UnitOfLinearMeasurementType	UnitOfLinearMeasurementType	1..1	
M	UnitOfLinearMeasurementType	UnitOfLinearMeasurementType	1..1	
MM	UnitOfLinearMeasurementType	UnitOfLinearMeasurementType	1..1	
NM	UnitOfLinearMeasurementType	UnitOfLinearMeasurementType	1..1	
SM	UnitOfLinearMeasurementType	UnitOfLinearMeasurementType	1..1	
YD	UnitOfLinearMeasurementType	UnitOfLinearMeasurementType	1..1	

791	**UnitOfTimeMeasurementHoursMinutesOrSecondsType** INTEL-FS Spiral 2::NATO::Datatypes::UnitOfTimeMeasurementHoursMinutesOrSecondsType Type: **<Class>**	UNIT OF TIME MEASUREMENT, HOURS, MINUTES, OR SECONDS1008441.023VariableStringIndividual platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#_JXKycIjYEeyic-Bak-igaQ

INTEL-FS Spiral 2::NATO::Datatypes::UnitOfTimeMeasurementHoursMinutesOrSecondsType - Owned Attributes

Attribute Name	Type Name	Defining Class	Mltplcty	Description
HR	UnitOfTimeMeasurementHoursMinutesOrSecondsType	UnitOfTimeMeasurementHoursMinutesOrSecondsType	1..1	
MIN	UnitOfTimeMeasurementHoursMinutesOrSecondsType	UnitOfTimeMeasurementHoursMinutesOrSecondsType	1..1	
SEC	UnitOfTimeMeasurementHoursMinutesOrSecondsType	UnitOfTimeMeasurementHoursMinutesOrSecondsType	1..1	

792	**UnitOfVolumeMeasurementCubicMetresType** INTEL-FS Spiral 2::NATO::Datatypes::UnitOfVolumeMeasurementCubicMetresType Type: **<Enumeration>**	platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#_SSliUJ-iEeyOTJlRnSKV0g

INTEL-FS Spiral 2::NATO::Datatypes::UnitOfVolumeMeasurementCubicMetresType - Owned Enumeration Literals

Name	Short Name	Value
CUM		
Undefined		
Results truncated to first 20 rows...		

793	**UnitOfWeightMassMeasurementType** INTEL-FS Spiral 2::NATO::Datatypes::UnitOfWeightMassMeasurementType Type: **<Class>**	UNIT OF WEIGHT MASS MEASUREMENT1008531.023VariableStringIndividual platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#_PLJYsIjXEeyic-Bak-igaQ

INTEL-FS Spiral 2::NATO::Datatypes::UnitOfWeightMassMeasurementType - Owned Attributes

Attribute Name	Type Name	Defining Class	Mltplcty	Description
KG	UnitOfWeightMassMeasurementType	UnitOfWeightMassMeasurementType	1..1	
KT	UnitOfWeightMassMeasurementType	UnitOfWeightMassMeasurementType	1..1	
LB	UnitOfWeightMassMeasurementType	UnitOfWeightMassMeasurementType	1..1	
LTN	UnitOfWeightMassMeasurementType	UnitOfWeightMassMeasurementType	1..1	
MT	UnitOfWeightMassMeasurementType	UnitOfWeightMassMeasurementType	1..1	
STN	UnitOfWeightMassMeasurementType	UnitOfWeightMassMeasurementType	1..1	
TNE	UnitOfWeightMassMeasurementType	UnitOfWeightMassMeasurementType	1..1	
TON	UnitOfWeightMassMeasurementType	UnitOfWeightMassMeasurementType	1..1	

794	**UnitPersonTypeType** INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Actor::Organisation::Unit::UnitPersonTypeType Type: **<Enumeration>**	platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#_J82L5JP3EeyQl-341BO9AA

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Actor::Organisation::Unit::UnitPersonTypeType - Owned Enumeration Literals		
Name	**Short Name**	**Value**
ABP		Afghan Border Police
ACM		Anti Coalition Militia
AHP		Afghan Highway Police
ANA		Afghan National Army
ANP		Afghan National Police
ASG		Afghan Support Group
CANMIL		Canadian Military Personnel
CF		Coalition Forces
CIV		Civilian Personnel
CNA		Coral National Army
EN		EN Personnel
EU		EU Personnel
EULEX		EU Rule of Law Mission in Kosovo
GOA		Government Of Afghanistan
INC		INC Personnel
INS		Insurgent
ISAF		ISAF Personnel
KBR		Kellog Brown and Root
KFOR		Kosovo Security Force
KP		Kosovo Police
Results truncated to first 20 rows...		

795	**UnitProtectionType** INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Actor::Organisation::Unit::UnitProtectionType Type: **<Enumeration>**	platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#_J82MMZP3EeyQl-341BO9AA

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Actor::Organisation::Unit::UnitProtectionType - Owned Enumeration Literals

Name	Short Name	Value
AAW		AAW
ASW		ASW
ASuW		ASuW
Armoured		Armoured
NKN		Not known
PDMS		Point Defence Missile System
THEATRE		Theatre Protection Capabilities
UKN		Unknown
Undefined		
Unprotected		Unprotected
Results truncated to first 20 rows...		

796	**UnitReference** INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Actor::Organisation::Unit::UnitReference Type: **<Enumeration>**	platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#_J82MRJP3EeyQl-341BO9AA

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Actor::Organisation::Unit::UnitReference - Owned Enumeration Literals		
Name	**Short Name**	**Value**
Belgium:ACC BGX		Belgium:ACC BGX
Belgium:LCC BGX		Belgium:LCC BGX
Belgium:NATO_BEL		Belgium:NATO_BEL
France:ADM		France:ADM
Italy:NATO_ITA_AF		Italy:NATO_ITA_AF
Italy:OP1_ITA_AF		Italy:OP1_ITA_AF
Italy:bgx		Italy:bgx
NATO:20190625_BGX_NATO_TEST_PED_COORDINATOR		NATO:20190625_BGX_NATO_TEST_PED_COORDINATOR
NATO:4456689		NATO:4456689
NATO:ACC-6360508U		NATO:ACC-6360508U
NATO:AIRCOM		NATO:AIRCOM
NATO:BGX-1		NATO:BGX-1
NATO:JFCBS		NATO:JFCBS
NATO:JFCNP		NATO:JFCNP
NATO:JFCNP-PED		NATO:JFCNP-PED
NATO:JFHQ		NATO:JFHQ
NATO:LANDCOM		NATO:LANDCOM
NATO:LCC-6361183U		NATO:LCC-6361183U
NATO:MARCOM		NATO:MARCOM
NATO:MCC-6360525U		NATO:MCC-6360525U
Results truncated to first 20 rows...		

797	**UnitRoleType** INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Actor::Organisation::Unit::UnitRoleType Type: **<Enumeration>**	Describes the principal role that a unit is organized, structured, and equipped to perform. Units can be: COM (Combat), CSU (Combat Support), SVS (Service Support), CMD (Command), or INS (Insurgent). This list is not exhaustive. [P0026] [AIDM Version 3/ BICC/ INTEL-FS Spiral 1] platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#_J82Mh5P3EeyQl-341BO9AA

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Actor::Organisation::Unit::UnitRoleType - Owned Enumeration Literals		
Name	**Short Name**	**Value**
AAVN		Army Aviation
AAW		Anti Air Warfare
AD		Air Defense
AF		Air Force
AGB		Icebreaker
AMPH		Amphibious
ARTY		Artillery
ASW		ASW
ASuW		ASuW
ASuW / ASW		ASuW / ASW
AT		Anti Tank
AUX		Auxiliary
BM		Ballistic Missile
BRIDG		Bridge Engineering
CARRIER		Aviation Carrier
CAV		Cavalry
CBRN		Chemical, Biological, Radiological, Nuclear
CDCM		CDCM
COMMS		COMMS
Cargo		Cargo Ship
Results truncated to first 20 rows...		

798	**UnitSizeCode** INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Actor::Organisation::Unit::UnitSizeCode Type: **<Enumeration>**	platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#_J82NNJP3EeyQl-341BO9AA

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Actor::Organisation::Unit::UnitSizeCode - Owned Enumeration Literals		
Name	**Short Name**	**Value**
AG		Army group
ARMY		Army
BATGRP		Battle group
BDE		Brigade
BDEGRP		Brigade group
BN		Battalion
BNG		Battalion group
CORPS		Corps
COY		Company
COYG		Company group
DIV		Division
FLEET		Fleet
FLIGHT		Flight
NKN		Not known
NOS		Not otherwise specified
NTF		Task force, Navy
NTG		Task group, Navy
NTU		Task unit, Navy
PLT		Platoon
REGION		Region
Results truncated to first 20 rows...		

799	**UnitSpecialityType** INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Actor::Organisation::Unit::UnitSpecialityType Type: **<Enumeration>**	Mission speciality. Describes the specialized capability possessed by a unit that permits the accomplishment of its principal mission. When used, the specific Speciality values should take precedence over the generic values. When no Speciality is either applicable to the unit, or when Speciality cannot be determined, then this data element should be left blank. [P0031] [AIDM Version 3/ BICC/ INTEL-FS Spiral 1] platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#_J82NbZP3EeyQl-341BO9AA

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Actor::Organisation::Unit::UnitSpecialityType - Owned Enumeration Literals		
Name	**Short Name**	**Value**
1.X.3.1		Unknown
1.X.3.1.1		Unknown (COMBAT)
1.X.3.1.1.1		Unknown (AIR DEFENCE)
1.X.3.1.1.1.1		SHORT RANGE
1.X.3.1.1.1.2		MISSILE
1.X.3.1.1.1.2.4		MISSILE - H/MAD
1.X.3.1.1.1.3		GUN UNIT
1.X.3.1.1.1.4		COMPOSITE
1.X.3.1.1.1.5		TARGETING UNIT
1.X.3.1.1.1.6		THEATRE MISSILE DEFENCE UNIT
1.X.3.1.1.10		Unknown (INTERNAL SECURITY FORCES)
1.X.3.1.1.10.1		RIVERINE
1.X.3.1.1.10.2		GROUND
1.X.3.1.1.10.2.1		GROUND - DISMOUNTED
1.X.3.1.1.10.2.2		GROUND - MOTORIZED
1.X.3.1.1.10.2.3		GROUND - MECHANIZED
1.X.3.1.1.10.3		WHEELED MECHANIZED
1.X.3.1.1.10.4		RAILROAD
1.X.3.1.1.10.5		AVIATION
1.X.3.1.1.2		Unknown (ARMOUR)
Results truncated to first 20 rows...		

800	**UnitStatusReport** INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Actor::Organisation::Unit::UnitStatusReport Type: **<Class>**	A military element whose structure is prescribed by a competent authority. 1996.01.09 [AAP-06] platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#_J8Zfy5P3EeyQl-341BO9AA

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Actor::Organisation::Unit::UnitStatusReport - Owned Attributes				
Attribute Name	**Type Name**	**Defining Class**	**Mltplcty**	**Description**
ACOIdentificationCode	String	UnitStatusReport	0..1	
ActivationEndDate	DateTimeZuluType	UnitStatusReport	0..1	
ActivationStartDate	DateTimeZuluType	UnitStatusReport	0..1	
ActivityRole	UnitRoleType	UnitStatusReport	0..1	
ActivityType	ActivityType	UnitStatusReport	0..1	
Actor	Actor	ActorStatusReport	1..1	
Address	PhysicalAddress	StatusReport	0..1	
AlertStatus	String	UnitStatusReport	0..1	
AlternativelyKnownAs	BSOAlternativeIdentity	StatusReport	0..*	Alternate Name for the BSO. If the name is reported in more than one language, the name in other languages except English will be tracked here. Also, nicknames, loose translations of the name, aliases, etc. will also be tracked here. The Alternate Name will follow the naming convention for the specific BSO, if identified. [IFAS1-SOP]
AnalystComment	String	IntelligenceInformationEntity	0..1	Comment on the product. The Comment field will identify analyst comments regarding the implications of the information and other assessments. [IFAS1-SOP]
AssignementStatus	AllianceStatusType	UnitStatusReport	0..1	
Available	Boolean	UnitStatusReport	0..1	
AviationCode	AviationCodeType	UnitStatusReport	0..1	
BPs	BusinessProcess	IntelligenceInformationEntity	0..*	
BSIIEAttributes	BattlespaceAttribute	StatusReport	0..*	

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Actor::Organisation::Unit::UnitStatusReport - Owned Attributes				
Attribute Name	**Type Name**	**Defining Class**	**Mltplcty**	**Description**
BasicEncyclopediaNumber	BasicEncyclopediaNumberType	StatusReport	0..1	The Basic Encyclopaedia (BE) Number is generated by a number of agencies involved in maintaining United States military databases and exists for a very large number of significant installations in the world. The AIntP-03 Key is based on a very similar data structure and can be easily converted to a BE Number. It is, however, recommended that when the BE Number for an Installation (or Facility) is known that it should be entered into the BE NUMBER Field and the BE NUMBER IS KEY Field switched to "Y" (Yes). Thus the BE Number would act as the Key for your record, improving the ability to interchange records without duplication or the creation on multiple, mismatched records on a single Place.[AINTP-3]
BattlespaceIIE	BattlespaceIIE	StatusReport	1..1	
Category	UnitCategory	UnitStatusReport	0..1	
City	String	StatusReport	0..1	
CombatEffectiveness	CombatEffectiveness	UnitStatusReport	0..1	
Country	SP1_CountryCode	StatusReport	0..1	
Course	String	UnitStatusReport	0..1	
Description	String	IntelligenceInformationEntity	0..1	
Direction	DirectionType	UnitStatusReport	0..1	
DutyStatus	DutyStatusType	UnitStatusReport	0..1	
EchelonForce	String	UnitStatusReport	0..1	
ExtensibleType	ExtensibleTypeGroup	Entity	0..1	
FormationCategory	FormationCategoryType	UnitStatusReport	0..1	
HeadQuarter	HeadquarterType	UnitStatusReport	0..1	
Hostility	HostilityType	StatusReport	0..1	
ID	Integer	Entity	0..1	
IIEAttributes	IIEAttribute	IntelligenceInformationEntity	0..*	
Identification	String	UnitStatusReport	0..1	
IdentifierUUID	String	Entity	0..1	

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Actor::Organisation::Unit::UnitStatusReport - Owned Attributes				
Attribute Name	**Type Name**	**Defining Class**	**Mltplcty**	**Description**
Key	String	Entity	1..1	
MIM_geographicLocation	Location	StatusReport	0..1	
MIP_echelon	Echelon	UnitStatusReport	1..1	
MIP_employmentCaveatText	String	UnitStatusReport	0..1	
MIP_equipmentScalingCode	EquipmentScalingCode	UnitStatusReport	0..1	
MIP_equipmentTeardownDuration	TimeDuration	UnitStatusReport	0..1	
MIP_formalAbbreviatedName	Token	UnitStatusReport	0..1	
MIP_generalMobility	Mobility	UnitStatusReport	0..1	
MIP_higherFormationName	Token	UnitStatusReport	0..1	
MIP_isArmouredIndicator	Boolean	UnitStatusReport	0..1	
MIP_isNotionalIndicator	Boolean	UnitStatusReport	0..1	
MIP_isTaskForceIndicator	Boolean	UnitStatusReport	0..1	
MIP_mainEquipmentSpecification	MainEquipmentSpecification	UnitStatusReport	0..*	
MIP_personnelStrength	PersonnelCount	UnitStatusReport	0..1	
MIP_reinforcementCode	UnitReinforcementCode	UnitStatusReport	0..1	
MIP_supplementarySpecialisationCode	UnitSupplementarySpecialisationCode	UnitStatusReport	0..1	
MIP_supportedMilitaryOrganisation	MilitaryOrganisation	UnitStatusReport	0..1	
MIP_transportationCode	UnitTransportationCode	UnitStatusReport	0..1	
MIP_usesUnmannedVehiclesIndicator	Boolean	UnitStatusReport	0..1	
Metadata	BattlespaceMetadata	StatusReport	1..1	
MissionType	String	UnitStatusReport	0..1	
Mobility	MobilityType	UnitStatusReport	0..1	
MobilityStatus	MobilityStatusType	UnitStatusReport	0..1	
MultiNationalForce		UnitStatusReport	0..1	
Name	String	Entity	0..1	

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Actor::Organisation::Unit::UnitStatusReport - Owned Attributes				
Attribute Name	**Type Name**	**Defining Class**	**Mltplcty**	**Description**
Number	String	UnitStatusReport	0..1	
OPFORUnit		UnitStatusReport	0..1	
OperationalReadiness	Boolean	UnitStatusReport	0..1	
OperationalStatus	OperationalStatusType	UnitStatusReport	0..1	
OrderOfBattle	OrderOfBattleType	UnitStatusReport	0..1	
PMESII	PMESII	StatusReport	0..1	
PersonnelCrisis	Integer	UnitStatusReport	0..1	
PersonnelMaterialEffectiveness	PersonelMaterialEffectivenessType	UnitStatusReport	0..1	
PersonnelPeace	Integer	UnitStatusReport	0..1	
PersonnelReported	Integer	UnitStatusReport	0..1	
Protection	UnitProtectionType	UnitStatusReport	0..1	
ReactionTime	TimeDuration	UnitStatusReport	0..1	
ReasonOpStatDegraded	String	UnitStatusReport	0..1	
Region	RegionType	StatusReport	0..1	
Rresponsibility	String	UnitStatusReport	0..1	
SP1_Allegiance	SP1_AllegianceType	ActorStatusReport	1..1	
SP1_Echelon	SP1_EchelonType	UnitStatusReport	0..1	
SP1_ElevationUnit	DistanceUnitsType	StatusReport	0..1	
SP1_GeoEntities	Geometry	IntelligenceInformationEntity	0..*	
SP1_GgeographicElevation	AltitudeType	StatusReport	0..1	
SP1_Nation	SP1_CountryCode	UnitStatusReport	0..1	
SP2_Allegiance	SP2_CountryCodeAllegiance	ActorStatusReport	1..1	
SP2_Echelon	SP2_EchelonSize	UnitStatusReport	0..1	
Size	UnitSizeCode	UnitStatusReport	0..1	

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Actor::Organisation::Unit::UnitStatusReport - Owned Attributes				
Attribute Name	**Type Name**	**Defining Class**	**Mltplcty**	**Description**
Source	String	StatusReport	0..1	Where the information originated from, e.g. from an external report. [IFAS-SP2]
Speed		UnitStatusReport	0..1	
StatusReportAssessment	StatusReportAssessment	StatusReport	0..1	
StatusReports	StatusReport	BattlespaceIIE	1..*	
SubRegion	SubRegionType	StatusReport	0..1	
Summary	String	IntelligenceInformationEntity	0..1	An account of the content of the resource, including abstracts in the case of document-like objects or content descriptions in the case of visual resources. It shall be in English language. [IPIWG-4.20] Summary of the product. The Summary field will summarise the latest known information about the BSO. When pre-populating a BSR from an earlier BSR, old and irrelevant text will be deleted/updated. [IFAS1-SOP]
Unit	Unit	UnitStatusReport	1..1	
UnitAttributes	UnitAttribute	UnitStatusReport	0..*	
UnitEquipmentLine	UnitEquipmentLine	UnitStatusReport	0..*	
UnitSpeciality	UnitSpecialityType	UnitStatusReport	0..1	
UnitType	SP1_UnitTypeType	UnitStatusReport	0..1	
UnitTypeEquipment	UnitTypeEquipmentType	UnitStatusReport	0..1	

801	**UnitSupplementarySpecialisationCode** INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Actor::Organisation::Unit::UnitSupplementarySpecialisationCode Type: **<Enumeration>**	platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#_J8_VoJP3EeyQl-341BO9AA

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Actor::Organisation::Unit::UnitSupplementarySpecialisationCode - Owned Enumeration Literals

Name	Short Name	Value
AIR		Air
AIRBRN		Airborne
AMPH		Amphibious
ARASLT		Air assault
ARCTIC		Arctic
ARMORD		Armoured
GROUND		Ground
LIGHT		Light unit
MARINE		Marine
MECH		Mechanised
MOUNTN		Mountain
MTRSD		Motorised
NAVAL		Naval
Undefined		
Results truncated to first 20 rows...		

802	**UnitTypeEquipmentType** INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Actor::Organisation::Unit::UnitTypeEquipmentType Type: **<Enumeration>**	platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#_J9JGoJP3EeyQl-341BO9AA

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Actor::Organisation::Unit::UnitTypeEquipmentType - Owned Enumeration Literals		
Name	**Short Name**	**Value**
ABU		Buoy Tender
ADG		Degaussing / Deperming Ship
AE(L)		Ammunition ship, light
AEM		Missile Support Ship
AET		Ammunition Transport Ship
AF		Stores Ship
AG		Auxiliary, Miscellaneous
AGB		Icebreaker
AGE		Research Vessel
AGF		Auxiliary, Flag or Command Ship
AGI		Intelligence Collection Ship
AGM		Missile Range Instrumentation Ship
AGOB		Polar Research Vessel
AGOR		Oceanographic Research Vessel
AGOR(H)		Oceanographic Research Vessel with helicopter
AGS		Survey Ship
AH		Hospital Ship
AIR		Aircraft
AK		Auxiliary, Cargo
Air Def		Air Defence
Results truncated to first 20 rows...		

803	**UnitUnitRelationshipCategoryCode** INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Actor::Organisation::Unit::UnitUnitRelationshipCategoryCode Type: **<Enumeration>**	Type of subordination between units. [A1272] [AIDM Version 3/ BICC/ INTEL-FS Spiral 1] platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#_xr53sJPzEeyQl-341BO9AA

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Actor::Organisation::Unit::UnitUnitRelationshipCategoryCode - Owned Enumeration Literals		
Name	**Short Name**	**Value**
AD		Admin
COAUT		Co-ordinating authority
COMD		Command or Full Command
COMPONENT HQ		COMPONENT HQ
CS		Combat Support
CTF		CTF
CTG		CTG
FUCOM		FUCOM
INDEPENDENT UNIT		INDEPENDENT UNIT
JF		Joint Force
JOINT FORCE HEADQUARTERS		JOINT FORCE HEADQUARTERS
NATPAR		National Parent
NKN		Not known
NOS		Not otherwise specified
OPCOM		Operational Command
OPCON		Operational Control
OR		Organization
SC		Comms Support
SG		General Support
SL		Logistics Support
Results truncated to first 20 rows...		

804	**Unit_Equipment** INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Actor::Organisation::Unit::Unit_Equipment Type: **<AssociationClass>**	<p Equipment owned by an Organisation should generally be recorded to reflect the peacetime on-hand holdings by type and number, together with an "evaluation" of the number held. If equipment is located with an organisation for training, repair, evaluation or other purposes, it can also be associated to the organisation record together with the reason for its presence. The Equipment Key, Equipment Code, Common Name and Nomenclature will be recorded in the equipment record, together with important characteristics of the equipment (Tracked or wheeled, gun calibre etc - Equipment Description 1 & 2), the primary function of each equipment (Bomber, Long-Range; Missile Tracking Radar; Helicopter, Medium, Anti-tank etc.). The Association record should contain details of the equipments operational status (Operational, Non-operational, Readiness State etc.), condition (e.g. Ready for operations, damaged, abandoned etc), any relevant activity and the location of the equipment. The location co-ordinates should normally represent the centre of the smallest rectangle that encompasses all of the area occupied by the organisation's equipment. Each equipment to organisation association should, at a minimum, reflect the organisations garrison location and peacetime on-hand equipment holdings. [AINTP-3]</p <p Unit to equipment relationship.This link provides for the association of a Unit with its authorized or on-hand Equipment.This relationship should reflect the quantity and operational condition of the Equipment. [AIDM Version 3/ BICC/ INTEL-FS Spiral 1]</p <p The holding contains the list of items assigned to a unit and their associated logistics quantities (on hand, required on hand, actual totals, required totals) [TOPFAS-CDM]</p platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#_XeF-kPpEEemoqLjBo08w4g

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Actor::Organisation::Unit::Unit_Equipment - Owned Attributes				
Attribute Name	**Type Name**	**Defining Class**	**Mltplcty**	**Description**
Actor	Actor	Actor_Equipment	0..*	
AnalystComment	String	IntelligenceInformationEntity	0..1	Comment on the product. The Comment field will identify analyst comments regarding the implications of the information and other assessments. [IFAS1-SOP]
BPs	BusinessProcess	IntelligenceInformationEntity	0..*	
BattlespaceIIE	BattlespaceIIE	BattlespaceIIE_Equipment	0..*	
BattlespaceIIE1	BattlespaceIIE	BattlespaceIIE_BattlespaceIIE	0..*	
BattlespaceIIE2	BattlespaceIIE	BattlespaceIIE_BattlespaceIIE	0..*	
ColourCode	ColourCodeType	BattlespaceIIE_BattlespaceIIE	0..1	
Description	String	IntelligenceInformationEntity	0..1	
Equipment	Equipment	Unit_Equipment	0..*	
EquipmentQuantityStatus	EquipmentQuantityStatus	BattlespaceIIE_Equipment	0..1	
ExtensibleType	ExtensibleTypeGroup	Entity	0..1	
HoldingType	EquipmentHoldingType	BattlespaceIIE_Equipment	0..1	
ID	Integer	Entity	0..1	
IIEAttributes	IIEAttribute	IntelligenceInformationEntity	0..*	
IdentifierUUID	String	Entity	0..1	
Key	String	Entity	1..1	
Metadata	BattlespaceMetadata	BattlespaceIIE_BattlespaceIIE	1..1	
Name	String	Entity	0..1	
ORBAT	ORBAT	Actor_Equipment	0..*	
Quantity	Integer	BattlespaceIIE_Equipment	0..1	
RelationDirectionType	RelationDirectionType	IIE_IIE	0..1	
SP1_EndDTG	DateTimeZuluType	IIE_IIE	0..1	

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Actor::Organisation::Unit::Unit_Equipment - Owned Attributes				
Attribute Name	**Type Name**	**Defining Class**	**Mltplcty**	**Description**
SP1_GeoEntities	Geometry	IntelligenceInformationEntity	0..*	
SP1_StartDTG	DateTimeZuluType	IIE_IIE	0..1	
Strength	StrengthType	IIE_IIE	0..1	
Summary	String	IntelligenceInformationEntity	0..1	An account of the content of the resource, including abstracts in the case of document-like objects or content descriptions in the case of visual resources. It shall be in English language. [IPIWG-4.20] Summary of the product. The Summary field will summarise the latest known information about the BSO. When pre-populating a BSR from an earlier BSR, old and irrelevant text will be deleted/updated. [IFAS1-SOP]
Unit	Unit	Unit_Equipment	0..*	
UnitEquipmentRelationshipCategoryCode	UnitEquipmentRelationshipCategoryCode	Unit_Equipment	0..1	

805	**Unit_Unit** INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Actor::Organisation::Unit::Unit_Unit Type: **<AssociationClass>**	The association between an Organisation and its garrison or deployed location, its equipment, personnel, personalities and other Organisations, should be expressed as a type of relationship and a time period. The relationship between Organisations should identify a hierarchical structure that must be reflected in the nature of the association[AINTP-3]. Typically associations are expressed by developing statements around key words e.g. Commands/Commanded (by); Defines/Defined; Groups/Grouped; Included; Location (for)/Located (at); Owner (of)/Owned (by); Supported (by)/Supports; Uses/Used. See the Introduction to the BRs for a detailed explanation of the nature of Associations. The period of the association is typically expressed as a beginning and end date.Unit to unit relationship. This link provides for the association of a Unit to another Unit under various conditions. It may reflect the command subordination of one Unit to another and the provision of, for example, training, logistics and communications support to another Unit [AIDM Version 3/ BICC/ INTEL-FS Spiral 1] platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#_rArAoPo0EemoqLjBo08w4g

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Actor::Organisation::Unit::Unit_Unit - Owned Attributes				
Attribute Name	**Type Name**	**Defining Class**	**Mltplcty**	**Description**
Actor1	Actor	Actor_Actor	0..*	
Actor2	Actor	Actor_Actor	0..*	
AnalystComment	String	IntelligenceInformationEntity	0..1	Comment on the product. The Comment field will identify analyst comments regarding the implications of the information and other assessments. [IFAS1-SOP]
BPs	BusinessProcess	IntelligenceInformationEntity	0..*	
BattlespaceIIE1	BattlespaceIIE	BattlespaceIIE_BattlespaceIIE	0..*	
BattlespaceIIE2	BattlespaceIIE	BattlespaceIIE_BattlespaceIIE	0..*	
C2Duration	TimeDuration	MilitaryOrganisation_MilitaryOrganisation	0..1	
C2Type	C2TypeCode	MilitaryOrganisation_MilitaryOrganisation	0..1	
CategoryCode	UnitUnitRelationshipCategoryCode	MilitaryOrganisation_MilitaryOrganisation	0..1	
ColourCode	ColourCodeType	BattlespaceIIE_BattlespaceIIE	0..1	
Description	String	IntelligenceInformationEntity	0..1	
ExtensibleType	ExtensibleTypeGroup	Entity	0..1	
ID	Integer	Entity	0..1	
IIEAttributes	IIEAttribute	IntelligenceInformationEntity	0..*	
IdentifierUUID	String	Entity	0..1	
Key	String	Entity	1..1	
Metadata	BattlespaceMetadata	BattlespaceIIE_BattlespaceIIE	1..1	
MilitaryOrganisation1	MilitaryOrganisation	MilitaryOrganisation_MilitaryOrganisation	0..*	
MilitaryOrganisation2	MilitaryOrganisation	MilitaryOrganisation_MilitaryOrganisation	0..*	

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Actor::Organisation::Unit::Unit_Unit - Owned Attributes				
Attribute Name	**Type Name**	**Defining Class**	**Mltplcty**	**Description**
Name	String	Entity	0..1	
ORBAT	ORBAT	Actor_Actor	0..*	
Organisation1	Organisation	Organisation_Organisation	0..*	
Organisation2	Organisation	Organisation_Organisation	0..*	
OrganisationFunctionalAssociationCategoryCode	OrganisationFunctionalAssociationCategoryCode	Organisation_Organisation	1..1	
OrganisationOrganisationRelationshipCategoryCode	OrganisationOrganisationRelationshipCategoryCode	Organisation_Organisation	0..1	
PeaceWarMode		MilitaryOrganisation_MilitaryOrganisation	0..1	
RelationDirectionType	RelationDirectionType	IIE_IIE	0..1	
SP1_EndDTG	DateTimeZuluType	IIE_IIE	0..1	
SP1_GeoEntities	Geometry	IntelligenceInformationEntity	0..*	
SP1_StartDTG	DateTimeZuluType	IIE_IIE	0..1	
Strength	StrengthType	IIE_IIE	0..1	
Summary	String	IntelligenceInformationEntity	0..1	An account of the content of the resource, including abstracts in the case of document-like objects or content descriptions in the case of visual resources. It shall be in English language. [IPIWG-4.20] Summary of the product. The Summary field will summarise the latest known information about the BSO. When pre-populating a BSR from an earlier BSR, old and irrelevant text will be deleted/updated. [IFAS1-SOP]
Unit1	Unit	Unit_Unit	0..*	
Unit2	Unit	Unit_Unit	0..*	

806	**UseOfWMD** INTEL-FS Spiral 2::NATO::JISR::Staff::Plan::BallisticMissile::UseOfWMD Type: **<DataType>**	platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#_sA5wMAGAEeuuz6bCUGFSSQ

INTEL-FS Spiral 2::NATO::JISR::Staff::Plan::BallisticMissile::UseOfWMD - Owned Attributes

Attribute Name	Type Name	Defining Class	Mltplcty	Description
LikelyFirstUseOfWMD	String		0..1	

807	**ValidityStatus** INTEL-FS Spiral 2::NATO::JISR::Staff::Target::SP1_Target::ValidityStatus Type: **<Enumeration>**	platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#_CpIxbRUvEeuBSdMjVejhEA

INTEL-FS Spiral 2::NATO::JISR::Staff::Target::SP1_Target::ValidityStatus - Owned Enumeration Literals

Name	Short Name	Value
-		-
F		Not Validated
T		Validated
Undefined		
Results truncated to first 20 rows...		

808	**Vehicle** INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Materiel::Equipment::Vehicle::Vehicle Type: **<Class>**	Equipment that is designed to operate on land routes (other than rail) with a primary role of transporting personnel, equipment or supplies.[MIM-5.1] platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#_ERwQF5JVEeybR8MjY-oHwA

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Materiel::Equipment::Vehicle::Vehicle - Owned Attributes				
Attribute Name	**Type Name**	**Defining Class**	**Mltplcty**	**Description**
AnalystComment	String	IntelligenceInformationEntity	0..1	Comment on the product. The Comment field will identify analyst comments regarding the implications of the information and other assessments. [IFAS1-SOP]
BPs	BusinessProcess	IntelligenceInformationEntity	0..*	
CandidateTarget	CandidateTarget	Equipment	0..*	
Description	String	IntelligenceInformationEntity	0..1	
ExtensibleType	ExtensibleTypeGroup	Entity	0..1	
ID	Integer	Entity	0..1	
IIEAttributes	IIEAttribute	IntelligenceInformationEntity	0..*	
IdentifierUUID	String	Entity	0..1	
Key	String	Entity	1..1	
Metadata	BattlespaceMetadata	BattlespaceIIE	1..1	
Name	String	Entity	0..1	
ReportableItemIdentifier	String	Materiel	0..1	
SP1_GeoEntities	Geometry	IntelligenceInformationEntity	0..*	
SerialNumberIdentifier	String	Materiel	0..1	
StatusReports	VehicleStatusReport	Vehicle	0..*	

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Materiel::Equipment::Vehicle::Vehicle - Owned Attributes				
Attribute Name	**Type Name**	**Defining Class**	**Mltplcty**	**Description**
Summary	String	IntelligenceInformationEntity	0..1	An account of the content of the resource, including abstracts in the case of document-like objects or content descriptions in the case of visual resources. It shall be in English language. [IPIWG-4.20] Summary of the product. The Summary field will summarise the latest known information about the BSO. When pre-populating a BSR from an earlier BSR, old and irrelevant text will be deleted/updated. [IFAS1-SOP]
TECHINT	TECHINT	Equipment	1..1	Type of all (non-expendable) items needed to outfit/equip an individual or unit. [AIDM Version 3/ BICC/ INTEL-FS Spiral 1]
Target	Target	Equipment	0..*	
VehicleType	VehicleTECHINT	Vehicle	1..1	

809	**VehicleStatusReport** INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Materiel::Equipment::Vehicle::VehicleStatusReport Type: **<Class>**	Equipment that is designed to operate on land routes (other than rail) with a primary role of transporting personnel, equipment or supplies.[MIM-5.1] platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#_hWHI4J_DEeyOTJlRnSKV0g

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Materiel::Equipment::Vehicle::VehicleStatusReport - Owned Attributes				
Attribute Name	**Type Name**	**Defining Class**	**Mltplcty**	**Description**
AccountingUnit	Integer	EquipmentStatusReport	0..1	
Address	PhysicalAddress	StatusReport	0..1	
AlternativelyKnownAs	BSOAlternativeIdentity	StatusReport	0..*	Alternate Name for the BSO. If the name is reported in more than one language, the name in other languages except English will be tracked here. Also, nicknames, loose translations of the name, aliases, etc. will also be tracked here. The Alternate Name will follow the naming convention for the specific BSO, if identified. [IFAS1-SOP]
AnalystComment	String	IntelligenceInformationEntity	0..1	Comment on the product. The Comment field will identify analyst comments regarding the implications of the information and other assessments. [IFAS1-SOP]
BPs	BusinessProcess	IntelligenceInformationEntity	0..*	
BSIIEAttributes	BattlespaceAttribute	StatusReport	0..*	
BasicEncyclopediaNumber	BasicEncyclopediaNumberType	StatusReport	0..1	The Basic Encyclopaedia (BE) Number is generated by a number of agencies involved in maintaining United States military databases and exists for a very large number of significant installations in the world. The AIntP-03 Key is based on a very similar data structure and can be easily converted to a BE Number. It is, however, recommended that when the BE Number for an Installation (or Facility) is known that it should be entered into the BE NUMBER Field and the BE NUMBER IS KEY Field switched to "Y" (Yes). Thus the BE Number would act as the Key for your record, improving the ability to interchange records without duplication or the creation on multiple, mismatched records on a single Place.[AINTP-3]
BattlespaceIIE	BattlespaceIIE	StatusReport	1..1	
City	String	StatusReport	0..1	
Colour	EquipmentColourType	EquipmentStatusReport	0..1	
Condition	ConditionType	EquipmentStatusReport	0..1	
Country	SP1_CountryCode	StatusReport	0..1	

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Materiel::Equipment::Vehicle::VehicleStatusReport - Owned Attributes				
Attribute Name	**Type Name**	**Defining Class**	**Mltplcty**	**Description**
Description	String	IntelligenceInformationEntity	0..1	
Equipment	Equipment	EquipmentStatusReport	1..1	
EquipmentAttributes	EquipmentAttribute	EquipmentStatusReport	0..*	
Evaluation	EquipmentEvaluationType	EquipmentStatusReport	0..1	
ExtensibleType	ExtensibleTypeGroup	Entity	0..1	
Hostility	HostilityType	StatusReport	0..1	
ID	Integer	Entity	0..1	
IIEAttributes	IIEAttribute	IntelligenceInformationEntity	0..*	
Identifier	String	EquipmentStatusReport	0..1	
IdentifierUUID	String	Entity	0..1	
Key	String	Entity	1..1	
MIM_geographicLocation	Location	StatusReport	0..1	
Metadata	BattlespaceMetadata	StatusReport	1..1	
Name	String	Entity	0..1	
Nomenclature	String	EquipmentStatusReport	0..1	
PMESII	PMESII	StatusReport	0..1	
Region	RegionType	StatusReport	0..1	
SP1_Allegiance	SP1_AllegianceType	EquipmentStatusReport	1..1	
SP1_ElevationUnit	DistanceUnitsType	StatusReport	0..1	
SP1_GeoEntities	Geometry	IntelligenceInformationEntity	0..*	
SP1_GgeographicElevation	AltitudeType	StatusReport	0..1	
SP2_Allegiance	SP2_CountryCodeAllegiance	EquipmentStatusReport	1..1	
Source	String	StatusReport	0..1	Where the information originated from, e.g. from an external report. [IFAS-SP2]

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Materiel::Equipment::Vehicle::VehicleStatusReport - Owned Attributes				
Attribute Name	**Type Name**	**Defining Class**	**Mltplcty**	**Description**
StatusReportAssessment	StatusReportAssessment	StatusReport	0..1	
StatusReports	StatusReport	BattlespaceIIE	1..*	
SubRegion	SubRegionType	StatusReport	0..1	
Summary	String	IntelligenceInformationEntity	0..1	An account of the content of the resource, including abstracts in the case of document-like objects or content descriptions in the case of visual resources. It shall be in English language. [IPIWG-4.20] Summary of the product. The Summary field will summarise the latest known information about the BSO. When pre-populating a BSR from an earlier BSR, old and irrelevant text will be deleted/updated. [IFAS1-SOP]
Year	Year4DigitType	EquipmentStatusReport	0..1	

810	**VehicleTECHINT** INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Materiel::Equipment::Vehicle::VehicleTECHINT Type: **<Class>**	Equipment that is designed to operate on land routes (other than rail) with a primary role of transporting personnel, equipment or supplies.[MIM-5.1] platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#_9z08KJ_CEeyOTJlRnSKV0g

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Materiel::Equipment::Vehicle::VehicleTECHINT - Owned Attributes				
Attribute Name	**Type Name**	**Defining Class**	**Mltplcty**	**Description**
AnalystComment	String	IntelligenceInformationEntity	0..1	Comment on the product. The Comment field will identify analyst comments regarding the implications of the information and other assessments. [IFAS1-SOP]
BPs	BusinessProcess	IntelligenceInformationEntity	0..*	
Category	EquipmentCategoryType	TECHINT	0..1	
CommonName	String	TECHINT	0..1	
CountryOfOrigin	SP1_CountryCode	TECHINT	0..1	
Description	String	IntelligenceInformationEntity	0..1	
Equipment	Equipment	TECHINT	0..*	
ExtensibleType	ExtensibleTypeGroup	Entity	0..1	
FullModel	String	TECHINT	0..1	
ID	Integer	Entity	0..1	
IIEAttributes	IIEAttribute	IntelligenceInformationEntity	0..*	
IdentifierUUID	String	Entity	0..1	
Key	String	Entity	1..1	
Metadata	BattlespaceMetadata	BattlespaceIIE	1..1	
Model	String	TECHINT	0..1	
Name	String	Entity	0..1	
SP1_EquipmentTypeType	SP1_EquipmentTypeType	TECHINT	0..1	
SP1_GeoEntities	Geometry	IntelligenceInformationEntity	0..*	
SP2_EquipmentTypeType	SP2_EquipmentType	TECHINT	0..1	
StatusReports	VehicleTECHINTStatusReport	VehicleTECHINT	1..*	

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Materiel::Equipment::Vehicle::VehicleTECHINT - Owned Attributes				
Attribute Name	**Type Name**	**Defining Class**	**Mltplcty**	**Description**
Summary	String	IntelligenceInformationEntity	0..1	An account of the content of the resource, including abstracts in the case of document-like objects or content descriptions in the case of visual resources. It shall be in English language. [IPIWG-4.20] Summary of the product. The Summary field will summarise the latest known information about the BSO. When pre-populating a BSR from an earlier BSR, old and irrelevant text will be deleted/updated. [IFAS1-SOP]
TECHINTAttributes	TECHINTAttribute	TECHINT	0..*	
Vehicle	Vehicle	VehicleTECHINT	0..*	

811	**VehicleTECHINTStatusReport** INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Materiel::Equipment::Vehicle::VehicleTECHINTStatusReport Type: **<Class>**	Equipment that is designed to operate on land routes (other than rail) with a primary role of transporting personnel, equipment or supplies.[MIM-5.1] platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#_9z08IJ_CEeyOTJlRnSKV0g

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Materiel::Equipment::Vehicle::VehicleTECHINTStatusReport - Owned Attributes				
Attribute Name	**Type Name**	**Defining Class**	**Mltplcty**	**Description**
Address	PhysicalAddress	StatusReport	0..1	
AlternativelyKnownAs	BSOAlternativeIdentity	StatusReport	0..*	Alternate Name for the BSO. If the name is reported in more than one language, the name in other languages except English will be tracked here. Also, nicknames, loose translations of the name, aliases, etc. will also be tracked here. The Alternate Name will follow the naming convention for the specific BSO, if identified. [IFAS1-SOP]
AnalystComment	String	IntelligenceInformationEntity	0..1	Comment on the product. The Comment field will identify analyst comments regarding the implications of the information and other assessments. [IFAS1-SOP]
BPs	BusinessProcess	IntelligenceInformationEntity	0..*	
BSIIEAttributes	BattlespaceAttribute	StatusReport	0..*	
BasicEncyclopediaNumber	BasicEncyclopediaNumberType	StatusReport	0..1	The Basic Encyclopaedia (BE) Number is generated by a number of agencies involved in maintaining United States military databases and exists for a very large number of significant installations in the world. The AIntP-03 Key is based on a very similar data structure and can be easily converted to a BE Number. It is, however, recommended that when the BE Number for an Installation (or Facility) is known that it should be entered into the BE NUMBER Field and the BE NUMBER IS KEY Field switched to "Y" (Yes). Thus the BE Number would act as the Key for your record, improving the ability to interchange records without duplication or the creation on multiple, mismatched records on a single Place.[AINTP-3]
BattlespaceIIE	BattlespaceIIE	StatusReport	1..1	
City	String	StatusReport	0..1	
Country	SP1_CountryCode	StatusReport	0..1	
Crew	Integer	VehicleTECHINTStatusReport	0..1	
Description	String	IntelligenceInformationEntity	0..1	
EquipmentType	TECHINT	TECHINTStatusReport	1..1	

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Materiel::Equipment::Vehicle::VehicleTECHINTStatusReport - Owned Attributes				
Attribute Name	**Type Name**	**Defining Class**	**Mltplcty**	**Description**
ExtensibleType	ExtensibleTypeGroup	Entity	0..1	
Hostility	HostilityType	StatusReport	0..1	
ID	Integer	Entity	0..1	
IIEAttributes	IIEAttribute	IntelligenceInformationEntity	0..*	
IdentifierUUID	String	Entity	0..1	
Key	String	Entity	1..1	
MIM_geographicLocation	Location	StatusReport	0..1	
MaximumGrade	AngleDegrees	VehicleTECHINTStatusReport	0..1	Steepest slope that can be climbed by the launch platform
Metadata	BattlespaceMetadata	StatusReport	1..1	
MobilityCode	MobilityCode	VehicleTECHINTStatusReport	0..1	Code categorising the type of mobility of the equipment e.g. towed
Name	String	Entity	0..1	
OrderOfBattleEquipment	OrderOfBattleEquipmentType	TECHINTStatusReport	0..1	
PMESII	PMESII	StatusReport	0..1	
Range	Distance	TECHINTStatusReport	0..1	
Region	RegionType	StatusReport	0..1	
SP1_ElevationUnit	DistanceUnitsType	StatusReport	0..1	
SP1_GeoEntities	Geometry	IntelligenceInformationEntity	0..*	
SP1_GgeographicElevation	AltitudeType	StatusReport	0..1	
Size	DimensionsLengthWidthHeightType	TECHINTStatusReport	0..1	
Source	String	StatusReport	0..1	Where the information originated from, e.g. from an external report. [IFAS-SP2]
Speed	Speed	TECHINTStatusReport	0..1	
SpeedTable	MobileSystemSpeedTable	VehicleTECHINTStatusReport	0..1	
StatusReportAssessment	StatusReportAssessment	StatusReport	0..1	

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Materiel::Equipment::Vehicle::VehicleTECHINTStatusReport - Owned Attributes				
Attribute Name	**Type Name**	**Defining Class**	**Mltplcty**	**Description**
StatusReports	StatusReport	BattlespaceIIE	1..*	
SubCategory	EquipmentSubCategoryType	TECHINTStatusReport	0..1	
SubRegion	SubRegionType	StatusReport	0..1	
Summary	String	IntelligenceInformationEntity	0..1	An account of the content of the resource, including abstracts in the case of document-like objects or content descriptions in the case of visual resources. It shall be in English language. [IPIWG-4.20] Summary of the product. The Summary field will summarise the latest known information about the BSO. When pre-populating a BSR from an earlier BSR, old and irrelevant text will be deleted/updated. [IFAS1-SOP]
TECHINTAttributes	TECHINTAttribute	TECHINTStatusReport	0..*	
VehicleHeight	Distance	VehicleTECHINTStatusReport	0..1	Width of launch platform
VehicleLength	Distance	VehicleTECHINTStatusReport	0..1	Width of launch platform
VehicleMass	Mass	VehicleTECHINTStatusReport	0..1	
VehicleNumber	Integer	VehicleTECHINTStatusReport	0..1	Number of vehicles which the ballistic missile (BM) launcher type comprises
VehicleObstacleCrossingCapability	Distance	VehicleTECHINTStatusReport	0..1	Maximum obstacle that can be crossed by the launch platform
VehicleTurningRadius	Distance	VehicleTECHINTStatusReport	0..1	Minimum turning circle of launch platform
VehicleType	VehicleTECHINT	VehicleTECHINTStatusReport	1..1	
VehicleUnrefuelledRange	Distance	VehicleTECHINTStatusReport	0..1	Maximum distance that the launch platform can drive before re-fuelling
VehicleWeightLoaded	Mass	VehicleTECHINTStatusReport	0..1	Weight of launch platform
VehicleWeightUnloaded	Mass	VehicleTECHINTStatusReport	0..1	Weight of launch platform
VehicleWidth	Distance	VehicleTECHINTStatusReport	0..1	Width of launch platform
Weight	Mass	TECHINTStatusReport	0..1	

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Materiel::Equipment::Vehicle::VehicleTECHINTStatusReport - Owned Attributes				
Attribute Name	**Type Name**	**Defining Class**	**Mltplcty**	**Description**

812	**VerifiedEnemySubordination** INTEL-FS Spiral 2::NATO::JISR::Staff::ORBAT::BallisticMissile::VerifiedEnemySubordination Type: **<Enumeration>**	platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#_WjvXUPyCEemNtI3vTXwM_w

INTEL-FS Spiral 2::NATO::JISR::Staff::ORBAT::BallisticMissile::VerifiedEnemySubordination - Owned Enumeration Literals

Name	Short Name	Value
C		
ELMOF		
NA		
NATPAR		
OPCOMD		
OPCON		
TACCOMD		
TACNTL		
UNKNOWN		
Undefined		

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813	**Vessel** INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Materiel::Equipment::Vessel::Vessel Type: **<Class>**	Equipment that is designed to operate on or under the water surface.[MIM-5.1].Specific identifiable ship at its home port or operational water area. [AIDM Version 3/ BICC/ INTEL-FS Spiral 1] platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#_SnMwqZJZEeybR8MjY-oHwA

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Materiel::Equipment::Vessel::Vessel - Owned Attributes				
Attribute Name	**Type Name**	**Defining Class**	**Mltplcty**	**Description**
AnalystComment	String	IntelligenceInformationEntity	0..1	Comment on the product. The Comment field will identify analyst comments regarding the implications of the information and other assessments. [IFAS1-SOP]
BPs	BusinessProcess	IntelligenceInformationEntity	0..*	
CandidateTarget	CandidateTarget	Equipment	0..*	
Description	String	IntelligenceInformationEntity	0..1	
ExtensibleType	ExtensibleTypeGroup	Entity	0..1	
ID	Integer	Entity	0..1	
IIEAttributes	IIEAttribute	IntelligenceInformationEntity	0..*	
IdentifierUUID	String	Entity	0..1	
Key	String	Entity	1..1	
Metadata	BattlespaceMetadata	BattlespaceIIE	1..1	
Name	String	Entity	0..1	
ReportableItemIdentifier	String	Materiel	0..1	
SP1_GeoEntities	Geometry	IntelligenceInformationEntity	0..*	
SP2_StatusReports	VesselStatusReport	Vessel	1..*	
SerialNumberIdentifier	String	Materiel	0..1	
StatusReports	EquipmentStatusReport	Equipment	1..*	

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Materiel::Equipment::Vessel::Vessel - Owned Attributes				
Attribute Name	**Type Name**	**Defining Class**	**Mltplcty**	**Description**
Summary	String	IntelligenceInformationEntity	0..1	An account of the content of the resource, including abstracts in the case of document-like objects or content descriptions in the case of visual resources. It shall be in English language. [IPIWG-4.20] Summary of the product. The Summary field will summarise the latest known information about the BSO. When pre-populating a BSR from an earlier BSR, old and irrelevant text will be deleted/updated. [IFAS1-SOP]
TECHINT	TECHINT	Equipment	1..1	Type of all (non-expendable) items needed to outfit/equip an individual or unit. [AIDM Version 3/ BICC/ INTEL-FS Spiral 1]
Target	Target	Equipment	0..*	
VesselType	VesselTECHINT	Vessel	1..1	

814	**VesselPropulsionTypeCode** INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Materiel::Equipment::Vessel::VesselPropulsionTypeCode Type: **<Enumeration>**	The type of power used to move a Vessel.[MIM-5.1]. platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#_SnV4wJJZEeybR8MjY-oHwA

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Materiel::Equipment::Vessel::VesselPropulsionTypeCode - Owned Enumeration Literals		
Name	**Short Name**	**Value**
AirIndependentPropulsion		
CombinedDieselAndGasTurbine		
CombinedDieselOrGasTurbine		
CombinedGasOrGasTurbine		
CombinedNuclearAndSteam		
CombinedSteamAndGasTurbine		
DieselElectric		
DieselEngine		
DieselEngineOrWaterJet		
DieselGenerator		
ElectricMotor		
GasTurbine		
GasolineEngine		
Nuclear		
NuclearTurboElectric		
Oars		
PumpJet		
Sail		
Turbine		
TurboElectric		
Results truncated to first 20 rows...		

815	**VesselStatusReport** INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Materiel::Equipment::Vessel::VesselStatusReport Type: **<Class>**	Equipment that is designed to operate on or under the water surface.[MIM-5.1]. platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#_umFy_aBMEeyETpRON54dlQ

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Materiel::Equipment::Vessel::VesselStatusReport - Owned Attributes				
Attribute Name	**Type Name**	**Defining Class**	**Mltplcty**	**Description**
AccountingUnit	Integer	EquipmentStatusReport	0..1	
Address	PhysicalAddress	StatusReport	0..1	
AlternativelyKnownAs	BSOAlternativeIdentity	StatusReport	0..*	Alternate Name for the BSO. If the name is reported in more than one language, the name in other languages except English will be tracked here. Also, nicknames, loose translations of the name, aliases, etc. will also be tracked here. The Alternate Name will follow the naming convention for the specific BSO, if identified. [IFAS1-SOP]
AnalystComment	String	IntelligenceInformationEntity	0..1	Comment on the product. The Comment field will identify analyst comments regarding the implications of the information and other assessments. [IFAS1-SOP]
BPs	BusinessProcess	IntelligenceInformationEntity	0..*	
BSIIEAttributes	BattlespaceAttribute	StatusReport	0..*	
BasicEncyclopediaNumber	BasicEncyclopediaNumberType	StatusReport	0..1	The Basic Encyclopaedia (BE) Number is generated by a number of agencies involved in maintaining United States military databases and exists for a very large number of significant installations in the world. The AIntP-03 Key is based on a very similar data structure and can be easily converted to a BE Number. It is, however, recommended that when the BE Number for an Installation (or Facility) is known that it should be entered into the BE NUMBER Field and the BE NUMBER IS KEY Field switched to "Y" (Yes). Thus the BE Number would act as the Key for your record, improving the ability to interchange records without duplication or the creation on multiple, mismatched records on a single Place.[AINTP-3]
BattlespaceIIE	BattlespaceIIE	StatusReport	1..1	
City	String	StatusReport	0..1	
Colour	EquipmentColourType	EquipmentStatusReport	0..1	
Condition	ConditionType	EquipmentStatusReport	0..1	
Country	SP1_CountryCode	StatusReport	0..1	

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Materiel::Equipment::Vessel::VesselStatusReport - Owned Attributes				
Attribute Name	**Type Name**	**Defining Class**	**Mltplcty**	**Description**
Description	String	IntelligenceInformationEntity	0..1	
Equipment	Equipment	EquipmentStatusReport	1..1	
EquipmentAttributes	EquipmentAttribute	EquipmentStatusReport	0..*	
Evaluation	EquipmentEvaluationType	EquipmentStatusReport	0..1	
ExtensibleType	ExtensibleTypeGroup	Entity	0..1	
Hostility	HostilityType	StatusReport	0..1	
ID	Integer	Entity	0..1	
IIEAttributes	IIEAttribute	IntelligenceInformationEntity	0..*	
Identifier	String	EquipmentStatusReport	0..1	
IdentifierUUID	String	Entity	0..1	
Key	String	Entity	1..1	
MIM_geographicLocation	Location	StatusReport	0..1	
MIP_acousticMeritMeasure	Decimal	VesselStatusReport	0..1	
MIP_deadWeightMeasure	Decimal	VesselStatusReport	0..1	
MIP_draughtDimension	Decimal	VesselStatusReport	0..1	
MIP_grossRegisteredTonnageMeasure	Decimal	VesselStatusReport	0..1	
MIP_heightAboveTheWaterlineDimension	Decimal	VesselStatusReport	0..1	
MIP_hullNumberIdentifier	Token	VesselStatusReport	0..1	
MIP_isIMOCompliantIndicator	Boolean	VesselStatusReport	0..1	
MIP_magneticDegaussingMeasure	Decimal	VesselStatusReport	0..1	
MIP_maximumSpeed	Decimal	VesselStatusReport	0..1	
MIP_operationalDisplacementMeasure	Decimal	VesselStatusReport	0..1	
MIP_prismaticCoefficientRatio	Decimal	VesselStatusReport	0..1	
MIP_propellerQuantity	Decimal	VesselStatusReport	0..1	
MIP_propulsionTypeCode	VesselPropulsionTypeCode	VesselStatusReport	0..1	

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Materiel::Equipment::Vessel::VesselStatusReport - Owned Attributes				
Attribute Name	**Type Name**	**Defining Class**	**Mltplcty**	**Description**
Metadata	BattlespaceMetadata	StatusReport	1..1	
Name	String	Entity	0..1	
Nomenclature	String	EquipmentStatusReport	0..1	
PMESII	PMESII	StatusReport	0..1	
Region	RegionType	StatusReport	0..1	
SP1_Allegiance	SP1_AllegianceType	EquipmentStatusReport	1..1	
SP1_ElevationUnit	DistanceUnitsType	StatusReport	0..1	
SP1_GeoEntities	Geometry	IntelligenceInformationEntity	0..*	
SP1_GgeographicElevation	AltitudeType	StatusReport	0..1	
SP2_Allegiance	SP2_CountryCodeAllegiance	EquipmentStatusReport	1..1	
Source	String	StatusReport	0..1	Where the information originated from, e.g. from an external report. [IFAS-SP2]
StatusReportAssessment	StatusReportAssessment	StatusReport	0..1	
StatusReports	StatusReport	BattlespaceIIE	1..*	
SubRegion	SubRegionType	StatusReport	0..1	
Summary	String	IntelligenceInformationEntity	0..1	An account of the content of the resource, including abstracts in the case of document-like objects or content descriptions in the case of visual resources. It shall be in English language. [IPIWG-4.20] Summary of the product. The Summary field will summarise the latest known information about the BSO. When pre-populating a BSR from an earlier BSR, old and irrelevant text will be deleted/updated. [IFAS1-SOP]
Year	Year4DigitType	EquipmentStatusReport	0..1	

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Materiel::Equipment::Vessel::VesselStatusReport - Owned Attributes				
Attribute Name	**Type Name**	**Defining Class**	**Mltplcty**	**Description**

816	**VesselTECHINT** INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Materiel::Equipment::Vessel::VesselTECHINT Type: **<Class>**	Equipment that is designed to operate on or under the water surface.[MIM-5.1]. platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#_umFy9aBMEeyETpRON54dlQ

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Materiel::Equipment::Vessel::VesselTECHINT - Owned Attributes				
Attribute Name	**Type Name**	**Defining Class**	**Mltplcty**	**Description**
AnalystComment	String	IntelligenceInformationEntity	0..1	Comment on the product. The Comment field will identify analyst comments regarding the implications of the information and other assessments. [IFAS1-SOP]
BPs	BusinessProcess	IntelligenceInformationEntity	0..*	
Category	EquipmentCategoryType	TECHINT	0..1	
CommonName	String	TECHINT	0..1	
CountryOfOrigin	SP1_CountryCode	TECHINT	0..1	
Description	String	IntelligenceInformationEntity	0..1	
Equipment	Equipment	TECHINT	0..*	
ExtensibleType	ExtensibleTypeGroup	Entity	0..1	
FullModel	String	TECHINT	0..1	
ID	Integer	Entity	0..1	
IIEAttributes	IIEAttribute	IntelligenceInformationEntity	0..*	
IdentifierUUID	String	Entity	0..1	
Key	String	Entity	1..1	
Metadata	BattlespaceMetadata	BattlespaceIIE	1..1	
Model	String	TECHINT	0..1	
Name	String	Entity	0..1	
SP1_EquipmentTypeType	SP1_EquipmentTypeType	TECHINT	0..1	
SP1_GeoEntities	Geometry	IntelligenceInformationEntity	0..*	
SP2_EquipmentTypeType	SP2_EquipmentType	TECHINT	0..1	
StatusReports	VesselTECHINTStatusReport	VesselTECHINT	1..*	

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Materiel::Equipment::Vessel::VesselTECHINT - Owned Attributes				
Attribute Name	**Type Name**	**Defining Class**	**Mltplcty**	**Description**
Summary	String	IntelligenceInformationEntity	0..1	An account of the content of the resource, including abstracts in the case of document-like objects or content descriptions in the case of visual resources. It shall be in English language. [IPIWG-4.20] Summary of the product. The Summary field will summarise the latest known information about the BSO. When pre-populating a BSR from an earlier BSR, old and irrelevant text will be deleted/updated. [IFAS1-SOP]
TECHINTAttributes	TECHINTAttribute	TECHINT	0..*	

817	**VesselTECHINTStatusReport** INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Materiel::Equipment::Vessel::VesselTECHINTStatusReport Type: **<Class>**	Equipment that is designed to operate on or under the water surface.[MIM-5.1]. platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#_umFy8KBMEeyETpRON54dlQ

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Materiel::Equipment::Vessel::VesselTECHINTStatusReport - Owned Attributes				
Attribute Name	**Type Name**	**Defining Class**	**Mltplcty**	**Description**
Address	PhysicalAddress	StatusReport	0..1	
AlternativelyKnownAs	BSOAlternativeIdentity	StatusReport	0..*	Alternate Name for the BSO. If the name is reported in more than one language, the name in other languages except English will be tracked here. Also, nicknames, loose translations of the name, aliases, etc. will also be tracked here. The Alternate Name will follow the naming convention for the specific BSO, if identified. [IFAS1-SOP]
AnalystComment	String	IntelligenceInformationEntity	0..1	Comment on the product. The Comment field will identify analyst comments regarding the implications of the information and other assessments. [IFAS1-SOP]
BPs	BusinessProcess	IntelligenceInformationEntity	0..*	
BSIIEAttributes	BattlespaceAttribute	StatusReport	0..*	
BasicEncyclopediaNumber	BasicEncyclopediaNumberType	StatusReport	0..1	The Basic Encyclopaedia (BE) Number is generated by a number of agencies involved in maintaining United States military databases and exists for a very large number of significant installations in the world. The AIntP-03 Key is based on a very similar data structure and can be easily converted to a BE Number. It is, however, recommended that when the BE Number for an Installation (or Facility) is known that it should be entered into the BE NUMBER Field and the BE NUMBER IS KEY Field switched to "Y" (Yes). Thus the BE Number would act as the Key for your record, improving the ability to interchange records without duplication or the creation on multiple, mismatched records on a single Place.[AINTP-3]
BattlespaceIIE	BattlespaceIIE	StatusReport	1..1	
City	String	StatusReport	0..1	
Country	SP1_CountryCode	StatusReport	0..1	
Description	String	IntelligenceInformationEntity	0..1	
EquipmentType	TECHINT	TECHINTStatusReport	1..1	
ExtensibleType	ExtensibleTypeGroup	Entity	0..1	

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Materiel::Equipment::Vessel::VesselTECHINTStatusReport - Owned Attributes				
Attribute Name	**Type Name**	**Defining Class**	**Mltplcty**	**Description**
Hostility	HostilityType	StatusReport	0..1	
ID	Integer	Entity	0..1	
IIEAttributes	IIEAttribute	IntelligenceInformationEntity	0..*	
IdentifierUUID	String	Entity	0..1	
Key	String	Entity	1..1	
MIM_geographicLocation	Location	StatusReport	0..1	
Metadata	BattlespaceMetadata	StatusReport	1..1	
Name	String	Entity	0..1	
OrderOfBattleEquipment	OrderOfBattleEquipmentType	TECHINTStatusReport	0..1	
PMESII	PMESII	StatusReport	0..1	
Range	Distance	TECHINTStatusReport	0..1	
Region	RegionType	StatusReport	0..1	
SP1_ElevationUnit	DistanceUnitsType	StatusReport	0..1	
SP1_GeoEntities	Geometry	IntelligenceInformationEntity	0..*	
SP1_GgeographicElevation	AltitudeType	StatusReport	0..1	
Size	DimensionsLengthWidthHeightType	TECHINTStatusReport	0..1	
Source	String	StatusReport	0..1	Where the information originated from, e.g. from an external report. [IFAS-SP2]
Speed	Speed	TECHINTStatusReport	0..1	
StatusReportAssessment	StatusReportAssessment	StatusReport	0..1	
StatusReports	StatusReport	BattlespaceIIE	1..*	
SubCategory	EquipmentSubCategoryType	TECHINTStatusReport	0..1	
SubRegion	SubRegionType	StatusReport	0..1	

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Materiel::Equipment::Vessel::VesselTECHINTStatusReport - Owned Attributes				
Attribute Name	**Type Name**	**Defining Class**	**Mltplcty**	**Description**
Summary	String	IntelligenceInformationEntity	0..1	An account of the content of the resource, including abstracts in the case of document-like objects or content descriptions in the case of visual resources. It shall be in English language. [IPIWG-4.20] Summary of the product. The Summary field will summarise the latest known information about the BSO. When pre-populating a BSR from an earlier BSR, old and irrelevant text will be deleted/updated. [IFAS1-SOP]
TECHINTAttributes	TECHINTAttribute	TECHINTStatusReport	0..*	
VesselType	VesselTECHINT	VesselTECHINTStatusReport	1..1	
Weight	Mass	TECHINTStatusReport	0..1	

818	**VideoCategory** INTEL-FS Spiral 2::NATO::JISR::Staff::Product::Video::VideoCategory Type: **<Enumeration>**	platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#_8b914e64f2c44f7eb0c13fa1354e3fc6

INTEL-FS Spiral 2::NATO::JISR::Staff::Product::Video::VideoCategory - Owned Enumeration Literals

Name	Short Name	Value
JHS		HS
JIR		IR
JMS		MS
JVIS		VIS
Undefined		

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819	**VideoProduct** INTEL-FS Spiral 2::NATO::JISR::Staff::Product::Video::VideoProduct Type: **<Class>**	platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#_v9kUIvvDEemmBcVzc-_U7g

INTEL-FS Spiral 2::NATO::JISR::Staff::Product::Video::VideoProduct - Owned Attributes				
Attribute Name	**Type Name**	**Defining Class**	**Mltplcty**	**Description**
Address	PhysicalAddress	ProductIIE	0..1	
AnalystComment	String	IntelligenceInformationEntity	0..1	Comment on the product. The Comment field will identify analyst comments regarding the implications of the information and other assessments. [IFAS1-SOP]
AverageBitRate	Integer	VideoProduct	0..1	
BPs	BusinessProcess	IntelligenceInformationEntity	0..*	
BasicEncyclopediaNumber	BasicEncyclopediaNumberType	ProductIIE	0..1	The Basic Encyclopaedia (BE) Number is generated by a number of agencies involved in maintaining United States military databases and exists for a very large number of significant installations in the world. The AIntP-03 Key is based on a very similar data structure and can be easily converted to a BE Number. It is, however, recommended that when the BE Number for an Installation (or Facility) is known that it should be entered into the BE NUMBER Field and the BE NUMBER IS KEY Field switched to "Y" (Yes). Thus the BE Number would act as the Key for your record, improving the ability to interchange records without duplication or the creation on multiple, mismatched records on a single Place.[AINTP-3]
CSDSourceLibrary	String	ProductIIE	0..1	
CardStatus	CardStatus	ProductIIE	0..1	
Categories	VideoCategory	VideoProduct	0..1	
Categorycode	CategoryCode	VideoProduct	0..1	
CentrePoint	Point	ProductIIE	0..1	
City	String	ProductIIE	0..1	
CommonType	CommonType	ProductIIE	0..1	
Country	SP1_CountryCode	ProductIIE	0..1	
Coverage	FileLink	VideoProduct	0..1	
Description	String	IntelligenceInformationEntity	0..1	
EncodingScheme	EncodingScheme	VideoProduct	0..1	

INTEL-FS Spiral 2::NATO::JISR::Staff::Product::Video::VideoProduct - Owned Attributes				
Attribute Name	**Type Name**	**Defining Class**	**Mltplcty**	**Description**
EncodingStatus	EncodingStatus	VideoProduct	0..1	
ExtensibleType	ExtensibleTypeGroup	Entity	0..1	
FrameRate	UnlimitedNatural	VideoProduct	0..1	
Functionalcategorycode	FunctionalCategoryCode	VideoProduct	0..1	
ID	Integer	Entity	0..1	
IIEAttributes	IIEAttribute	IntelligenceInformationEntity	0..*	
IdentifierUUID	String	Entity	0..1	
ImageType	ImageType	VideoProduct	0..1	
IsSTANAG	Boolean	ProductIIE	0..1	
IsStream	Boolean	VideoProduct	0..1	
Key	String	Entity	1..1	
Language	Language	ProductIIE	0..1	
Level	Integer	ProductIIE	0..1	
LowerRight	Point	ProductIIE	0..1	
MISMLevel	Integer	VideoProduct	0..1	
Metadata	FileLink	VideoProduct	0..1	
MetadataConfidentialityLabel	ConfidentialityLabelType	ProductIIE	0..1	
NATOId	String	VideoProduct	0..1	
Name	String	Entity	0..1	
NumberOfColumns	Integer	VideoProduct	0..1	
NumberOfRows	Integer	VideoProduct	0..1	
Region	RegionType	ProductIIE	0..1	
SP1_GeoEntities	Geometry	IntelligenceInformationEntity	0..*	
SpatialCountryCodes	SP1_CountryCode	ProductIIE	0..1	
StreamingUrl	String	VideoProduct	0..1	

INTEL-FS Spiral 2::NATO::JISR::Staff::Product::Video::VideoProduct - Owned Attributes				
Attribute Name	**Type Name**	**Defining Class**	**Mltplcty**	**Description**
SubRegion	SubRegionType	ProductIIE	0..1	
SubjectCategoryTargets	String	ProductIIE	0..1	
SubjectiveQualityCode	SubjectiveQualityCode	ProductIIE	0..1	
Summary	String	IntelligenceInformationEntity	0..1	An account of the content of the resource, including abstracts in the case of document-like objects or content descriptions in the case of visual resources. It shall be in English language. [IPIWG-4.20] Summary of the product. The Summary field will summarise the latest known information about the BSO. When pre-populating a BSR from an earlier BSR, old and irrelevant text will be deleted/updated. [IFAS1-SOP]
Target	String	VideoProduct	0..1	
TargetNumbers	String	ProductIIE	0..1	
TemporalEnd	DateTimeZuluType	ProductIIE	0..1	
TemporalStart	DateTimeZuluType	ProductIIE	0..1	
UpperLeft	Point	ProductIIE	0..1	

820	**Visibility** INTEL-FS Spiral 2::NATO::JISR::Domain::INTEL-FS Spiral 1 Other::Visibility Type: **<Enumeration>**	platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#_0qoF0P8IEemnbr38OATpNQ

INTEL-FS Spiral 2::NATO::JISR::Domain::INTEL-FS Spiral 1 Other::Visibility - Owned Enumeration Literals

Name	Short Name	Value
PRIVATE		
PUBLIC		
Undefined		
Results truncated to first 20 rows...		

821	**Volume** INTEL-FS Spiral 2::NATO::Datatypes::Volume Type: **<DataType>**	platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#_8ZYuMAvLEeuLxPWg5VIrUQ

INTEL-FS Spiral 2::NATO::Datatypes::Volume - Owned Attributes

Attribute Name	Type Name	Defining Class	Mltplcty	Description
Units	UnitOfVolumeMeasurementCubicMetresType		0..1	A measure of Volume expressed in cubic metres.
Value	UnlimitedNatural		0..1	

822	**WMDORBAT** INTEL-FS Spiral 2::NATO::JISR::Staff::ORBAT::BallisticMissile::WMDORBAT Type: **<Class>**	An OrganisationStructure that provides the identification, strength, command structure, and disposition of the personnel, units, and equipment of any military force. Remarks: Although sometimes used in other ways, this term most frequently applies to the grouping of forces for a specific campaign. [MIM-5.1]An Order of Battle (ORBAT) is is a catalogue listing the entities (force elements, military units and non-military elements) potentially available for operations with the ability to structure these entities into an organisational hierarchy. [TOPFAS CDM] platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#_QbYXwAY4Eeum2v_pqMzNlw

INTEL-FS Spiral 2::NATO::JISR::Staff::ORBAT::BallisticMissile::WMDORBAT - Owned Attributes				
Attribute Name	**Type Name**	**Defining Class**	**Mltplcty**	**Description**
Actor_Actor	Actor_Actor	ORBAT	0..*	
Actor_EquipmentHolding	Actor_Equipment	ORBAT	0..*	
AnalystComment	String	IntelligenceInformationEntity	0..1	Comment on the product. The Comment field will identify analyst comments regarding the implications of the information and other assessments. [IFAS1-SOP]
BMORBAT	BMORBAT	OPFORORBAT	0..*	
BPs	BusinessProcess	IntelligenceInformationEntity	0..*	
CapabilityOfCoordinationWithOtherAttacks	String	OPFORORBAT	0..1	
ChainOfCommand	String	ORBAT	0..1	
CommunicationsNetworkOrganisation	String	OPFORORBAT	0..1	
Country	SP1_CountryCode	ORBAT	0..1	
Description	String	IntelligenceInformationEntity	0..1	
ExtensibleType	ExtensibleTypeGroup	Entity	0..1	
HistoricalUse	String	OPFORORBAT	0..1	
ID	Integer	Entity	0..1	
IIEAttributes	IIEAttribute	IntelligenceInformationEntity	0..*	
IdentifierUUID	String	Entity	0..1	
Key	String	Entity	1..1	
Metadata	StaffMetadata	StaffIIE	1..1	
NOC	NationOfConcern	ORBAT	1..1	
Name	String	Entity	0..1	
ORBATName	String	ORBAT	0..1	
OperationPlanIdentifier	string	ORBAT	0..1	
OrderOfBattle	OrderOfBattleType	ORBAT	0..1	

INTEL-FS Spiral 2::NATO::JISR::Staff::ORBAT::BallisticMissile::WMDORBAT - Owned Attributes				
Attribute Name	**Type Name**	**Defining Class**	**Mltplcty**	**Description**
SP1_GeoEntities	Geometry	IntelligenceInformationEntity	0..*	
Summary	String	IntelligenceInformationEntity	0..1	An account of the content of the resource, including abstracts in the case of document-like objects or content descriptions in the case of visual resources. It shall be in English language. [IPIWG-4.20] Summary of the product. The Summary field will summarise the latest known information about the BSO. When pre-populating a BSR from an earlier BSR, old and irrelevant text will be deleted/updated. [IFAS1-SOP]
ValidtyEnd	DateTimeZuluType	ORBAT	0..1	
ValidtyStart	DateTimeZuluType	ORBAT	0..1	

823	**WarheadCategoryCode** INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Materiel::Equipment::BallisticMissile::WarheadCategoryCode Type: **<Enumeration>**	platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#__g3YQPi1EemkcIoqyiQteg

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Materiel::Equipment::BallisticMissile::WarheadCategoryCode - Owned Enumeration Literals

Name	Short Name	Value
BIOLOGICAL_SUBMUNITION		
BULK_CHEMICAL		
CHEMICAL_SUBMUNITION		
HE		
HE_BLAST_FRAGMENTATION		
HE_SUBMUNITION		
HE_THERMOBARIC		
NUCLEAR		
OTHER		
Undefined		

Results truncated to first 20 rows...

824	**WarheadType** INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Materiel::Equipment::BallisticMissile::WarheadType Type: **<Class>**	platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#_aulP8K3UEeynIZTqcIRC0A

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Materiel::Equipment::BallisticMissile::WarheadType - Owned Attributes

Attribute Name	Type Name	Defining Class	Mltplcty	Description
Construction	String	WarheadType	1..1	
KeepOutAltitude	AltitudeType	WarheadType	1..1	
MaximumReleaseAltitude	AltitudeType	WarheadType	1..1	
MinimumReleaseAltitude	AltitudeType	WarheadType	1..1	
PreferredTargetType	String	WarheadType	1..1	
ReentryVehicleTypeStatusReport	ReentryVehicleTECHINTStatusReport	WarheadType	1..1	
WarheadCategory	WarheadCategoryCode	WarheadType	1..1	
WarheadType	WarheadTypeCode	WarheadType	1..1	

825	**WarheadTypeCode** INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Materiel::Equipment::BallisticMissile::WarheadTypeCode Type: **<Enumeration>**	platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#_ZfM2QK3VEeynIZTqcIRC0A

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Materiel::Equipment::BallisticMissile::WarheadTypeCode - Owned Enumeration Literals

Name	Short Name	Value
Undefined		
Results truncated to first 20 rows...		

826	**Weapon** INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Materiel::Equipment::ElectronicWarfare::Weapon Type: **<Class>**	platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#_cHW0kCUiEeuVgZbrw16AKQ

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Materiel::Equipment::ElectronicWarfare::Weapon - Owned Attributes				
Attribute Name	**Type Name**	**Defining Class**	**Mltplcty**	**Description**
AnalystComment	String	IntelligenceInformationEntity	0..1	Comment on the product. The Comment field will identify analyst comments regarding the implications of the information and other assessments. [IFAS1-SOP]
BPs	BusinessProcess	IntelligenceInformationEntity	0..*	
CandidateTarget	CandidateTarget	Equipment	0..*	
Description	String	IntelligenceInformationEntity	0..1	
ExtensibleType	ExtensibleTypeGroup	Entity	0..1	
ID	Integer	Entity	0..1	
IIEAttributes	IIEAttribute	IntelligenceInformationEntity	0..*	
IdentifierUUID	String	Entity	0..1	
Key	String	Entity	1..1	
Metadata	BattlespaceMetadata	BattlespaceIIE	1..1	
Name	String	Entity	0..1	
ReportableItemIdentifier	String	Materiel	0..1	
SP1_GeoEntities	Geometry	IntelligenceInformationEntity	0..*	
SerialNumberIdentifier	String	Materiel	0..1	
StatusReports	WeaponStatusReport	Weapon	0..*	

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Materiel::Equipment::ElectronicWarfare::Weapon - Owned Attributes				
Attribute Name	**Type Name**	**Defining Class**	**Mltplcty**	**Description**
Summary	String	IntelligenceInformationEntity	0..1	An account of the content of the resource, including abstracts in the case of document-like objects or content descriptions in the case of visual resources. It shall be in English language. [IPIWG-4.20] Summary of the product. The Summary field will summarise the latest known information about the BSO. When pre-populating a BSR from an earlier BSR, old and irrelevant text will be deleted/updated. [IFAS1-SOP]
TECHINT	TECHINT	Equipment	1..1	Type of all (non-expendable) items needed to outfit/equip an individual or unit. [AIDM Version 3/ BICC/ INTEL-FS Spiral 1]
Target	Target	Equipment	0..*	
WeaponType	WeaponTECHINT	Weapon	1..1	

827	**WeaponModelType** INTEL-FS Spiral 2::NATO::JISR::Battlespace::Action::Event::WeaponModelType Type: **<Enumeration>**	platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#_90c2660e917a40079deb28751cb5c0c9

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Action::Event::WeaponModelType - Owned Enumeration Literals		
Name	**Short Name**	**Value**
.22 LR		.22 LR
.30 BROWNING / .30-06 SPRINGFIELD		.30 BROWNING / .30-06 SPRINGFIELD
.300 WINCHESTER MAGNUM		.300 WINCHESTER MAGNUM
.303 BRITISH SERVICE		.303 BRITISH SERVICE
.32 ACP / Type 64		.32 ACP / Type 64
.357 MAGNUM		.357 MAGNUM
.38 SPECIAL		.38 SPECIAL
.45 ACP		.45 ACP
.50 BROWNING		.50 BROWNING
0-832D HE		0-832D HE
0T62		0T62
100		100
100 MM NAVALI		100 MM NAVALI
12.7MM AA GUN		12.7MM AA GUN
12.7MM DShK		12.7MM DShK
122MM		122MM
130MM		130MM
14.5MM / KPV / ZPU		14.5MM / KPV / ZPU
14.5MM AA GUN		14.5MM AA GUN
152MM		152MM
Results truncated to first 20 rows...		

828	**WeaponSolution** INTEL-FS Spiral 2::NATO::JISR::Staff::Target::SP1_Target::WeaponSolution Type: **<DataType>**	platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#_N4VEMBU2EeuBSdMjVejhEA

INTEL-FS Spiral 2::NATO::JISR::Staff::Target::SP1_Target::WeaponSolution - Owned Attributes				
Attribute Name	**Type Name**	**Defining Class**	**Mltplcty**	**Description**
ATOObjective	AtoObjective		1..1	
AircraftQuantity	String		1..1	
DMPIID	String		1..1	
DSPAzimuth	String		1..1	
DSPSpinRate	String		1..1	
DeliveryPlatform	DeliveryPlatform		1..1	
DestructionProbability	String		1..1	
FuzeAltitude	String		1..1	
FuzeDelay	String		1..1	
FuzeMode	FuzeModeType		1..1	
FuzeName	String		1..1	
ImpactAngle	String		1..1	
ImpactAreaLength	String		1..1	
ImpactAreaWidth	String		1..1	
ImpactAzimuth	String		1..1	
ImpactMinSpeed	String		1..1	
Notes	String		1..1	
PriorityNumber	String		0..1	
TargetId	String		1..1	
WeaponQuantity	String		1..1	
WeaponSolutionNo	String		1..1	
WeaponType	JTSWeaponType		1..1	

829	**WeaponStatusReport** INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Materiel::Equipment::ElectronicWarfare::WeaponStatusReport Type: **<Class>**	platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#_cHW0kiUiEeuVgZbrw16AKQ

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Materiel::Equipment::ElectronicWarfare::WeaponStatusReport - Owned Attributes				
Attribute Name	**Type Name**	**Defining Class**	**Mltplcty**	**Description**
AccountingUnit	Integer	EquipmentStatusReport	0..1	
Address	PhysicalAddress	StatusReport	0..1	
AlternativelyKnownAs	BSOAlternativeIdentity	StatusReport	0..*	Alternate Name for the BSO. If the name is reported in more than one language, the name in other languages except English will be tracked here. Also, nicknames, loose translations of the name, aliases, etc. will also be tracked here. The Alternate Name will follow the naming convention for the specific BSO, if identified. [IFAS1-SOP]
AnalystComment	String	IntelligenceInformationEntity	0..1	Comment on the product. The Comment field will identify analyst comments regarding the implications of the information and other assessments. [IFAS1-SOP]
BPs	BusinessProcess	IntelligenceInformationEntity	0..*	
BSIIEAttributes	BattlespaceAttribute	StatusReport	0..*	
BasicEncyclopediaNumber	BasicEncyclopediaNumberType	StatusReport	0..1	The Basic Encyclopaedia (BE) Number is generated by a number of agencies involved in maintaining United States military databases and exists for a very large number of significant installations in the world. The AIntP-03 Key is based on a very similar data structure and can be easily converted to a BE Number. It is, however, recommended that when the BE Number for an Installation (or Facility) is known that it should be entered into the BE NUMBER Field and the BE NUMBER IS KEY Field switched to "Y" (Yes). Thus the BE Number would act as the Key for your record, improving the ability to interchange records without duplication or the creation on multiple, mismatched records on a single Place.[AINTP-3]
BattlespaceIIE	BattlespaceIIE	StatusReport	1..1	
City	String	StatusReport	0..1	
Colour	EquipmentColourType	EquipmentStatusReport	0..1	
Condition	ConditionType	EquipmentStatusReport	0..1	
Country	SP1_CountryCode	StatusReport	0..1	

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Materiel::Equipment::ElectronicWarfare::WeaponStatusReport - Owned Attributes				
Attribute Name	**Type Name**	**Defining Class**	**Mltplcty**	**Description**
Description	String	IntelligenceInformationEntity	0..1	
Equipment	Equipment	EquipmentStatusReport	1..1	
EquipmentAttributes	EquipmentAttribute	EquipmentStatusReport	0..*	
Evaluation	EquipmentEvaluationType	EquipmentStatusReport	0..1	
ExtensibleType	ExtensibleTypeGroup	Entity	0..1	
Hostility	HostilityType	StatusReport	0..1	
ID	Integer	Entity	0..1	
IIEAttributes	IIEAttribute	IntelligenceInformationEntity	0..*	
Identifier	String	EquipmentStatusReport	0..1	
IdentifierUUID	String	Entity	0..1	
Key	String	Entity	1..1	
MIM_geographicLocation	Location	StatusReport	0..1	
Metadata	BattlespaceMetadata	StatusReport	1..1	
Name	String	Entity	0..1	
Nomenclature	String	EquipmentStatusReport	0..1	
PMESII	PMESII	StatusReport	0..1	
Region	RegionType	StatusReport	0..1	
SP1_Allegiance	SP1_AllegianceType	EquipmentStatusReport	1..1	
SP1_ElevationUnit	DistanceUnitsType	StatusReport	0..1	
SP1_GeoEntities	Geometry	IntelligenceInformationEntity	0..*	
SP1_GgeographicElevation	AltitudeType	StatusReport	0..1	
SP2_Allegiance	SP2_CountryCodeAllegiance	EquipmentStatusReport	1..1	
Source	String	StatusReport	0..1	Where the information originated from, e.g. from an external report. [IFAS-SP2]

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Materiel::Equipment::ElectronicWarfare::WeaponStatusReport - Owned Attributes				
Attribute Name	**Type Name**	**Defining Class**	**Mltplcty**	**Description**
StatusReportAssessment	StatusReportAssessment	StatusReport	0..1	
StatusReports	StatusReport	BattlespaceIIE	1..*	
SubRegion	SubRegionType	StatusReport	0..1	
Summary	String	IntelligenceInformationEntity	0..1	An account of the content of the resource, including abstracts in the case of document-like objects or content descriptions in the case of visual resources. It shall be in English language. [IPIWG-4.20] Summary of the product. The Summary field will summarise the latest known information about the BSO. When pre-populating a BSR from an earlier BSR, old and irrelevant text will be deleted/updated. [IFAS1-SOP]
Weapon	Weapon	WeaponStatusReport	1..1	
Year	Year4DigitType	EquipmentStatusReport	0..1	

830	**WeaponTECHINT** INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Materiel::Equipment::ElectronicWarfare::WeaponTECHINT Type: **<Class>**	platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#_cHXboCUiEeuVgZbrw16AKQ

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Materiel::Equipment::ElectronicWarfare::WeaponTECHINT - Owned Attributes				
Attribute Name	**Type Name**	**Defining Class**	**Mltplcty**	**Description**
AnalystComment	String	IntelligenceInformationEntity	0..1	Comment on the product. The Comment field will identify analyst comments regarding the implications of the information and other assessments. [IFAS1-SOP]
BPs	BusinessProcess	IntelligenceInformationEntity	0..*	
Category	EquipmentCategoryType	TECHINT	0..1	
CommonName	String	TECHINT	0..1	
CountryOfOrigin	SP1_CountryCode	TECHINT	0..1	
Description	String	IntelligenceInformationEntity	0..1	
Equipment	Equipment	TECHINT	0..*	
ExtensibleType	ExtensibleTypeGroup	Entity	0..1	
FullModel	String	TECHINT	0..1	
ID	Integer	Entity	0..1	
IIEAttributes	IIEAttribute	IntelligenceInformationEntity	0..*	
IdentifierUUID	String	Entity	0..1	
Key	String	Entity	1..1	
Metadata	BattlespaceMetadata	BattlespaceIIE	1..1	
Model	String	TECHINT	0..1	
Name	String	Entity	0..1	
SP1_EquipmentTypeType	SP1_EquipmentTypeType	TECHINT	0..1	
SP1_GeoEntities	Geometry	IntelligenceInformationEntity	0..*	
SP2_EquipmentTypeType	SP2_EquipmentType	TECHINT	0..1	
StatusReports	WeaponTECHINTStatusReport	WeaponTECHINT	0..*	

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Materiel::Equipment::ElectronicWarfare::WeaponTECHINT - Owned Attributes				
Attribute Name	**Type Name**	**Defining Class**	**Mltplcty**	**Description**
Summary	String	IntelligenceInformationEntity	0..1	An account of the content of the resource, including abstracts in the case of document-like objects or content descriptions in the case of visual resources. It shall be in English language. [IPIWG-4.20] Summary of the product. The Summary field will summarise the latest known information about the BSO. When pre-populating a BSR from an earlier BSR, old and irrelevant text will be deleted/updated. [IFAS1-SOP]
TECHINTAttributes	TECHINTAttribute	TECHINT	0..*	
Weapon	Weapon	WeaponTECHINT	1..1	

831	**WeaponTECHINTStatusReport** INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Materiel::Equipment::ElectronicWarfare::WeaponTECHINTStatusReport Type: **<Class>**	platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#_cHYCsCUiEeuVgZbrw16AKQ

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Materiel::Equipment::ElectronicWarfare::WeaponTECHINTStatusReport - Owned Attributes				
Attribute Name	**Type Name**	**Defining Class**	**Mltplcty**	**Description**
Address	PhysicalAddress	StatusReport	0..1	
AlternativelyKnownAs	BSOAlternativeIdentity	StatusReport	0..*	Alternate Name for the BSO. If the name is reported in more than one language, the name in other languages except English will be tracked here. Also, nicknames, loose translations of the name, aliases, etc. will also be tracked here. The Alternate Name will follow the naming convention for the specific BSO, if identified. [IFAS1-SOP]
AnalystComment	String	IntelligenceInformationEntity	0..1	Comment on the product. The Comment field will identify analyst comments regarding the implications of the information and other assessments. [IFAS1-SOP]
BPs	BusinessProcess	IntelligenceInformationEntity	0..*	
BSIIEAttributes	BattlespaceAttribute	StatusReport	0..*	
BasicEncyclopediaNumber	BasicEncyclopediaNumberType	StatusReport	0..1	The Basic Encyclopaedia (BE) Number is generated by a number of agencies involved in maintaining United States military databases and exists for a very large number of significant installations in the world. The AIntP-03 Key is based on a very similar data structure and can be easily converted to a BE Number. It is, however, recommended that when the BE Number for an Installation (or Facility) is known that it should be entered into the BE NUMBER Field and the BE NUMBER IS KEY Field switched to "Y" (Yes). Thus the BE Number would act as the Key for your record, improving the ability to interchange records without duplication or the creation on multiple, mismatched records on a single Place.[AINTP-3]
BattlespaceIIE	BattlespaceIIE	StatusReport	1..1	
CEOBEF_WeaponType	WeaponType	WeaponTECHINTStatusReport	0..1	
City	String	StatusReport	0..1	
Country	SP1_CountryCode	StatusReport	0..1	
Description	String	IntelligenceInformationEntity	0..1	
EquipmentType	TECHINT	TECHINTStatusReport	1..1	

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Materiel::Equipment::ElectronicWarfare::WeaponTECHINTStatusReport - Owned Attributes				
Attribute Name	**Type Name**	**Defining Class**	**Mltplcty**	**Description**
ExtensibleType	ExtensibleTypeGroup	Entity	0..1	
Hostility	HostilityType	StatusReport	0..1	
ID	Integer	Entity	0..1	
IIEAttributes	IIEAttribute	IntelligenceInformationEntity	0..*	
IdentifierUUID	String	Entity	0..1	
Key	String	Entity	1..1	
MIM_geographicLocation	Location	StatusReport	0..1	
Metadata	BattlespaceMetadata	StatusReport	1..1	
Name	String	Entity	0..1	
OrderOfBattleEquipment	OrderOfBattleEquipmentType	TECHINTStatusReport	0..1	
PMESII	PMESII	StatusReport	0..1	
Range	Distance	TECHINTStatusReport	0..1	
Region	RegionType	StatusReport	0..1	
SP1_ElevationUnit	DistanceUnitsType	StatusReport	0..1	
SP1_GeoEntities	Geometry	IntelligenceInformationEntity	0..*	
SP1_GgeographicElevation	AltitudeType	StatusReport	0..1	
Size	DimensionsLengthWidthHeightType	TECHINTStatusReport	0..1	
Source	String	StatusReport	0..1	Where the information originated from, e.g. from an external report. [IFAS-SP2]
Speed	Speed	TECHINTStatusReport	0..1	
StatusReportAssessment	StatusReportAssessment	StatusReport	0..1	
StatusReports	StatusReport	BattlespaceIIE	1..*	
SubCategory	EquipmentSubCategoryType	TECHINTStatusReport	0..1	
SubRegion	SubRegionType	StatusReport	0..1	

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Object::Materiel::Equipment::ElectronicWarfare::WeaponTECHINTStatusReport - Owned Attributes				
Attribute Name	**Type Name**	**Defining Class**	**Mltplcty**	**Description**
Summary	String	IntelligenceInformationEntity	0..1	An account of the content of the resource, including abstracts in the case of document-like objects or content descriptions in the case of visual resources. It shall be in English language. [IPIWG-4.20] Summary of the product. The Summary field will summarise the latest known information about the BSO. When pre-populating a BSR from an earlier BSR, old and irrelevant text will be deleted/updated. [IFAS1-SOP]
TECHINTAttributes	TECHINTAttribute	TECHINTStatusReport	0..*	
WeaponType	WeaponTECHINT	WeaponTECHINTStatusReport	1..1	
Weight	Mass	TECHINTStatusReport	0..1	

832	**WeaponType** INTEL-FS Spiral 2::NATO::JISR::Battlespace::Action::Event::WeaponType Type: **<Enumeration>**	platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#_df43a9cba7bb4fb6babb2b7c3f49dead

INTEL-FS Spiral 2::NATO::JISR::Battlespace::Action::Event::WeaponType - Owned Enumeration Literals		
Name	**Short Name**	**Value**
A-ARMR;MISSILE		A-ARMR;MISSILE
AAA		Anti-Aircraft Artillery
ACFT		ACFT
ACR		ACR
AIR ;FIX-WING ACFT		AIR ;FIX-WING ACFT
AIR ;HELICOPTER		AIR ;HELICOPTER
AIR BMB/ROCKET/MISSL		AIR BMB/ROCKET/MISSL
AIRCRAFT		AIRCRAFT
AIRCRAFT (MISC)		AIRCRAFT (MISC)
AMMO		AMMO
ANTENNA		ANTENNA
ANTI-TANK		ANTI-TANK
APC		APC
APC (AAA)		APC (AAA)
ARMD COMMAND VEHICLE		ARMD COMMAND VEHICLE
ARMD FIGHTING VEH		ARMD FIGHTING VEH
ARMD PERS CARRIER		ARMD PERS CARRIER
ARMD RECCE VEHICLE		ARMD RECCE VEHICLE
ARMD RECOVERY VEH		ARMD RECOVERY VEH
ARMOR ;APC		ARMOR ;APC
Results truncated to first 20 rows...		

833	**Weight** INTEL-FS Spiral 2::NATO::Datatypes::Weight Type: **<DataType>**	platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#_RbTwEAQ_Ee2k2sDrVHuisA

INTEL-FS Spiral 2::NATO::Datatypes::Weight - Owned Attributes

Attribute Name	Type Name	Defining Class	Mltplcty	Description
Units	UnitOfWeightMassMeasurementType		0..1	
Value	UnlimitedNatural		0..1	

834	**WorldAreaNumberType** INTEL-FS Spiral 2::NATO::Datatypes::WorldAreaNumberType Type: **<Class>**	THE NUMBER OF THE WORLD AREA (FORMERLY THE WORLD AERONAUTICAL CHART NUMBER) IN WHICH A DESIGNATED PLACE, INSTALLATION, OR AREA IS LOCATED. SEE STANAG 2029. -- APP-11World area code. The WAC consists of a four digit group forming positions 1-4 of the BE Number. [P0113] [AIDM Version 3/ BICC/ INTEL-FS Spiral 1] platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#_ZvWvwJ77EeyXbaZqcCJdkQ

835	**Year4DigitType** INTEL-FS Spiral 2::NATO::Datatypes::Year4DigitType Type: **<Class>**	YEAR, 4 DIGIT100511.044FixedNumericRange platform:/resource/INTEL-FS/INTEL-FS%20CIM%20RDM.emx#_Vy414IggEeyNKu6aaOPH7w

NORTH ATLANTIC MILITARY COMMITTEE
COMITÉ MILITAIRE DE L'ATLANTIQUE NORD

23 February 2015 MC 0593 (Final)

FINAL DECISION ON MC 0593

MINIMUM LEVEL OF COMMAND AND CONTROL SERVICE CAPABILITIES IN SUPPORT OF COMBINED JOINT NATO LED OPERATIONS

1. On 20 Feb 15, the Military Committee approved MC 0593 "Minimum Level of Command and Control (C2) Service Capabilities in Support of Combined Joint NATO Led Operations".

2. This document clears IMSWM-0052-2014, 14 Feb 14, and all SDs thereto.

FOR THE MILITARY COMMITTEE:

Josef D. BLOTZ
Major General, DEU AR
Director Operations Division
International Military Staff

for Sir Christopher Harper
Air Marshal
Director General
International Military Staff

NOTE. This Final Decision Sheet shall now be attached to MC 0593 as the top sheet. Page numbering of the complete document when this decision is attached is as follows:

MC 0593 (Final)	- Page 1
MC 0593	- 142 pages

Distribution: SDL Z

IMS Control Nr: O15001163

MC 0593

MINIMUM LEVEL OF COMMAND AND CONTROL (C2) SERVICE

CAPABILITIES IN SUPPORT OF COMBINED JOINT NATO LED OPERATIONS

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EXECUTIVE SUMMARY

This document is a framework document for Combined Joint Command and Control (C2) in NATO led operations at strategic and operational level. It develops the C2 Services and related interoperability requirements, and presents the corresponding high level C2/Communication and Information System (CIS) organisational principles.

This document provides guidance to NATO Command Structure and NATO Force Structure entities on their roles and responsibilities, on critical NATO and National C2 capabilities required to support NATO led operations, taking into account the Consultation, Command and Control (C3) Classification Taxonomy, C2 and CIS Guidance.

C2 requirements and Information Exchange Requirements (IER) are derived from the annual NATO Response Force preparation and exercise experiences, and then extrapolated to the full spectrum of the NATO Level of Ambition. Furthermore, IERs and lessons learnt from recent and ongoing missions are considered and the major principles of Federated Mission Networking (FMN) for NATO led operations are reflected.

The document supports all C2/CIS aspects for the comprehensive approach, including information exchange with Non-NATO Entities.

The main body of the document sets out the generic principles and requirements. The annexes contain technical details, applying those principles to today's technology and systems. The technical evolution will be addressed through regular updates of the annexes to support the annual NATO Response Force preparation process.

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1. CHAPTER ONE – INTRODUCTION

1.1 Background.

1.1.1 MC 0593 is a framework document for Joint C2 in NATO led operations at strategic and operational level (Reference A).

1.1.2 Service specific Military Committee (MC) documents will cover the tactical level (e.g. MC 0195 and replacement of STANAG 5048 a new MC document). Figure 1-1 depicts the principle.

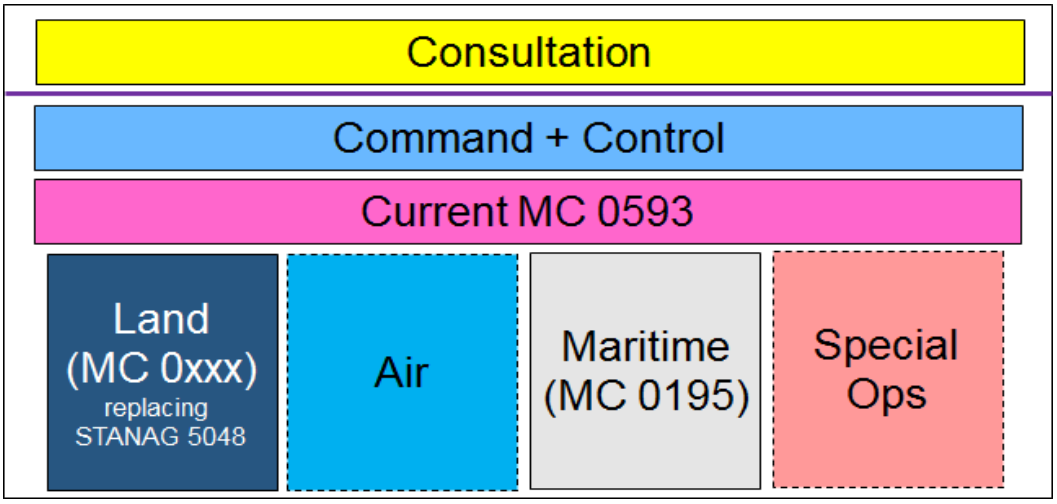


Figure 1-1: MC 0593 Framework Document for Joint C2 in NATO Led Operations

1.2 Aim. The aim of this document is to:

1.2.1 Provide guidance on principles, procedures and responsibilities for implementing the required interoperable C2 Services[1], which enhance efficient C2 and co-ordination of deployed forces and elements involved in NATO led operations;

1.2.2 Enable effective collaboration amongst C2 entities involved in NATO led operations;

1.2.3 Describe the architecture of headquarters and forces and minimum level of interoperability and standards of C2 Services;

1.2.4 Provide useful reference for NATO and Troop Contributing Nation (TCN) entities;

1.2.5 Assist NATO and TCNs in assessing their C2 Services capabilities to:

[1] C2 Services refer to the overall provisioning of Functional, Command & Control and Core Services (including the software and the licenses) supported by adequate CIS. These CIS are composed of Communications Systems (including local HQ network, the backbone access equipment and the end-user access equipment) and of Information Systems hosting the various Services. These C2 Services support commander's execution of Command and Control, the Staff Decision Making Process and Information Management.

a. Fulfil mission aims and related C2 functions,

b. Exercise the provision of C2 Services with any NATO assigned forces;

1.2.6 Address requirements applicable in the short term for the next NATO Response Force[2] (NRF) generation and certification process to the mid and long term joint operations through a yearly revision process of the annexes;

1.2.7 Constitute, in accordance with MC 586, a foundation for the implementation of a Mission Network for a NATO-led operation, by

a. Providing generic operational requirements for the development and implementation of a future network in support of NATO-led operations,

b. Considering current NATO existing Deployable Communication and Information Systems (DCIS) capability implementations and their ability to provide a significant capability in support of NATO led operations, and can therefore constitute an initial capability in the context of Federated Mission Networking (FMN)[3].

1.3 Scope. This publication:

1.3.1 Defines the IERs, NATO C2 Services and supporting standards for all Forces and Elements deployed in a Joint NATO Operation;

1.3.2 Outlines the C2 Services support to the Deployed Forces during the pre-deployment, deployment, sustainment and redeployment phases of an operation;

1.3.3 Describes the required CIS to implement interoperable C2 Services including DCIS funded by NATO and the associated National CIS to support Forces provided by NATO and non-NATO entities[4];

1.3.4 Provides guidance on all related C2 and CIS training;

1.3.5 Clarifies the provision principles, procedures and responsibilities amongst NATO, contributing NATO Nations and non-NATO entities in respect to the implementation of the required level of interoperability of C2 Services;

1.3.6 Considers current standards, technological advances in C2 Services and NATO Network Enabled Capability principles;

1.3.7 Provides guidance on the provision and operating of C2 Services Capabilities;

---

[2] The NRF is a coherent joint, trained and certified force package, held at very high readiness that will be tailored for an assigned mission.

[3] More details on the relationship and coherence between MC 0593 and FMN are provided in Annex I.

[4] Non-NATO Entities (NNEs) are defined in document AC/35-D/1040-REV6 Annex 1 – 21 Aug 2014. It includes Contractors on Operations, Exercises and Transformational activities, Governmental Organizations, Host Nations, International Organizations, Non-Governmental Organizations, Non-NATO Multinational Forces, Non-NATO Nations. The cooperation with these entities in any NATO led operations must be conducted in accordance with the relevant OPLANs approved by the North Atlantic Council (NAC) on a case by case basis.

1.3.8 Addresses technical interoperability requirements in annexes, to be reviewed regularly in support of the annual NATO Response Force preparation process, to reflect the evolution of the interoperability targets, moving from an application oriented approach towards interoperability standards based approach.

1.3.9 Does not detail information management as it is not part of the C2 service environment. However, it is understood that information management is critical to organising the mission information space[5].

1.4 Interim Changes and Supplementation. Interim changes or supplementations to this document are not authorized unless coordinated by the NATO Consultation, Command and Control Staff (NC3S) and approved by the Military Committee (MC) before coming into effect.

1.5 Future Revision. The main part of this document is anticipated to be a long term valid reference, while regular updates[6] of the annexes to support the annual NATO Response Force preparation process are foreseen as technology and implementation evolve.

1.6 Annexes.

1.6.1 Annex A lists the abbreviations introduced and used in this document.

1.6.2 Annex B contains a summary of relevant definitions used in this document.

1.6.3 Annex C lists the critical C2 processes for NATO led operations.

1.6.4 Annex D provides detailed information exchange requirements for NATO led Expeditionary Operations (EO) and provides a detailed list of information products generated and consumed by all relevant C2 entities using NRF (Small Joint Operation/SJO-2) as a scenario.

1.6.5 Annex E defines the CIS interoperability requirements between the C2 entities of a NATO led expeditionary operation. The basic network transport services required to support the information exchange are introduced, and each user service is mapped to one or more network transport services that it can use to traverse the Interface with Nations Module (INM) into the NATO provided core network.

1.6.6 Annex F defines the mandatory service baseline for short term requirements. Annex F also defines in which deployable C2 element and security domain the Functional Services (FS) shall be installed.

1.6.7 Annex G will list the requirements towards NATO and NATO Force Structure (NFS) provided DCIS to enable federation of Service Management and Control (SMC) in NATO led operations.

1.6.8 Annex H briefly introduces the IER definition as per AJP-6, and provides comparison to the Mission Threads.

---

[5] AC/322(EAPC)N(2011)0005, Guidance for Conductions Information Management in Joint Operations (CIMJO), 14 Jun 2011

[6] The review will be executed under the lead of the NHQC3S.

1.6.9 Annex I compares the principles set forth by MC 0593 to, and demonstrates alignment with, the Federated Mission Networking (FMN) principles introduced in the NATO Federated Mission Networking Implementation Plan (NFIP).

1.6.10 Finally, Annex J provides an overview in a chronological order of the relevant reference documents.

2. CHAPTER TWO – COMMAND AND CONTROL ENVIRONMENT

2.1 Strategic and Operational Environment.

NATO forces will need to be rapidly deployable and sustainable in austere environments regardless of the duration and tempo of operations. This necessitates that NATO forces must be agile, joint, combined and truly interoperable in character and design; enabling them to be employed wherever and whenever needed. In addition, the military must interact with non-NATO entities and consequently a more Comprehensive Approach (CA) to operations is required. The combination of notional operations and/or the handover from national led operations to NATO led operations also provides a significant degree of complexity driving Consultation, Command and Control (C3) requirements. The size and functionality of the static and deployable headquarters of the NATO Command Structure (NCS) as well as the national / multinational deployable forces and headquarters of the NATO Force Structure (NFS) must be tailored to meet the NATO Level of Ambition (LOA) baseline requirements. Key elements of operational context are explained in Reference B and the following paragraphs.

2.1.1 NATO C2 Services must have the capacity to support information collection, situation assessment, decision-making, collaboration and mission execution and control from the strategic to the tactical. The capacity of the networks and systems must also meet the IERs of the forces by efficient and timely transfer of data through appropriate network and bandwidth management.

2.1.2 Interoperability is a crucial element in supporting the information flow, not only between NCS and their forces but also with NFS HQs and non-NATO entities.

2.1.3 It is, therefore, essential that the deployed forces and elements involved in NATO operations have agreed provision principles, offer and consume interoperable services, and apply agreed standards. MC 0593 will define the provision principles, and describe the service requirements, derived from an IER analysis process. Finally, detailed standards and service profiles will be covered in the relevant profiles of the NATO Interoperability Standards and Profiles (NISP).

2.2 Strategic Guidance.

The Lisbon Summit in November 2010 confirmed the current NATO LOA. The Conceptual Framework for the Alliance Operations (CFAO), at Reference C, provides military strategic Direction and Guidance compliant with authoritative guidance.

2.3 Implementation Guidance.

2.3.1 The development of this MC document considers information available from the NATO Defence Planning Process (NDPP) cycle. Any future revision of this document will ensure direct linkage to the NDPP, and more specifically to the Minimum Capability Requirements (MCR) developed therein Reference D.

2.3.2 The minimum requirements of C2 Services is derived from:

a. High level NATO operational concepts,

b. Lessons Learnt/Identified from NATO operations,

c. NRF-like force generation and related exercises,

d. NATO agreed CIS policies and architectures,

e. Interoperability considerations.

2.3.3 The key factors that derive the size and the character of the C2 Services for the deployed forces in a NATO led joint operation are outlined as follows:

a. C2 of Deployed Operations. Military structure and C2 templates are explained in the CFAO,

b. Technology Integration and Evolution. Fielded C2 Services capabilities cannot be allowed to lag too far behind current quickly advancing technology. If they do, then NATO's ability to catch-up with future capabilities becomes increasingly impractical. This is the reason why evolution projects are included in Targets[7] to NATO for collective efforts (e.g. Capability Packages) and the nations, as they remain essential to coherent capability provision,

c. The C3 Classification Taxonomy (Reference E) is applied to classify services in this document. The on-going C2 Services Implementation provides Strategic Commands and their deployable elements C2 Services based on a Services Oriented Architecture (SOA),

d. Information Assurance Considerations. Operating with non-NATO entities in a coalition makes the Information Assurance (IA) infrastructure challenging. Information Assurance mechanisms are embedded into every aspect of the overall architecture. The emerging approach of "Need to Share" balanced with the "Need to Know" captures this intent. "Duty to Share" requires that NATO and national policies, procedures, and systems are developed and implemented with an inherent capability to share information, but have the necessary security measures in place to ensure only authorized users can access the information.

2.3.4 Mission Types, Generic Planning Situations and Case Studies[8], based on the Level of Ambition (PG11 LOA, Reference B) and used in NDPP, provide the essential foundation and operational context for the derivation of C2 Services requirements. The Mission Templates and derived Case Studies as defined in NDPP are used to assess the capabilities HQs and logistics bases must have for example in terms of survivability, portability or effect.

[7] Targets are defined in Step 3 (Apportionment of Requirements and Setting of Targets) of the NDPP; they represent requests to Nations and/or NATO for the development and/or delivery of required capabilities.

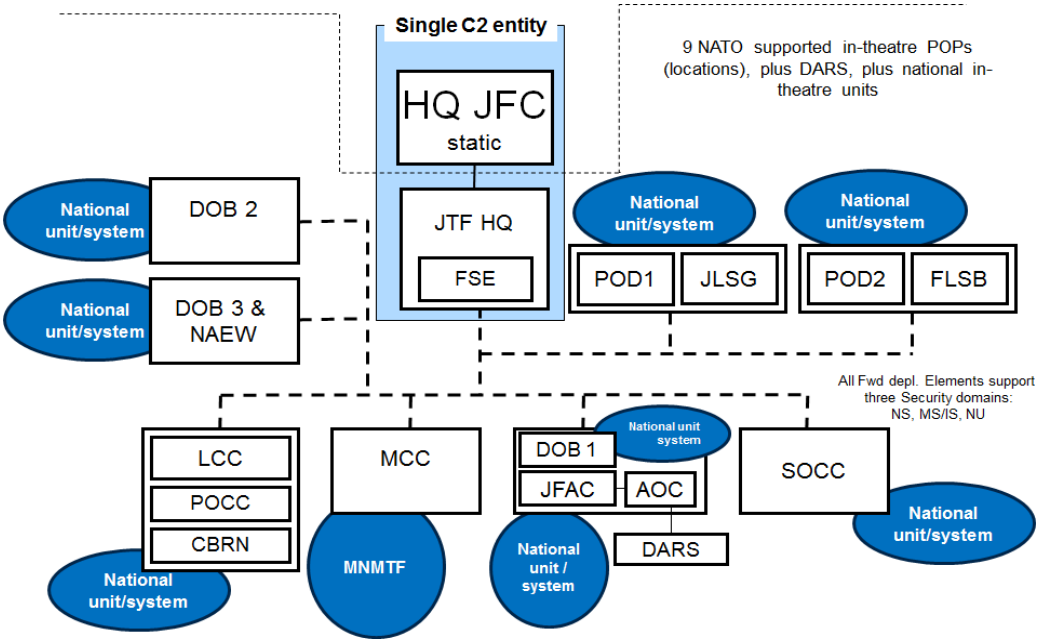
[8] Formally referred to as Planning Situations.

2.3.5 MC 0593 is already introducing an initial federation of networks (details see Chapter 3 and Annex I). Over time, networking arrangements will be implemented in a policy conform manner, aligned with milestones in the NFIP.

2.4 Combined Joint Operations Command Relationships.

2.4.1 The Command Relationships are explained in detail in the CFAO (Reference C). Exemplary, Figure 2-1 introduces the Command and Control template for a NATO led operation of type SJO-2 (NRF). It depicts the strategic and operational command level elements plus the logistical support entities (white squares), and the (multi-)national forces commanded by and supporting each C2 entity.

2.4.2 Note that the C2 elements represented in Figure 2-1 are generic and represent all types of C2 elements in a NATO led operation.



AOC: Air Operations Centre; CBRN: Chemical, Biological, Radiological and Nuclear Battalion HQ; DARS: Deployable Air Control Centre, Recognised Air Picture Production Centre, Sensor Fusion Post; DOB: Deployed operation (air)base (Log function); FLSB: Forward Logistics support base; FSE: Forward Support Element; HQ JFC: Headquarter Joint Forces Command; JLSG: Joint Logistics support group (Log HQ); JTF HQ: Joint Task Force HQ; LCC: Land Component Command; MCC: Maritime Component Command; MNMTF: Multi National Maritime Task Force; NAEW: NATO Airborne Early Warning Forward Operation Location; POCC: Psychological Operations Component Command; POD: Point of debarkation/embarkation (log function). SOCC: Special Ops Component Command

Figure 2-1: Command and Control Template for a NATO Led Expeditionary SJO-2

2.4.3 Multiple Actors. In today's modern warfare there are a greater range of actors[9] within the battle space who will be involved in, or will influence, the course of operations. There is the need to integrate the efforts of all different Services (Land, Maritime, Air, Special Operations, Logistics …) and all other actors.

[9] See footnote #4.

2.4.4 The operational commander will retain the C2 responsibility of the entire theatre battle space and therefore needs to monitor and analyse the assigned Joint Operations Area (JOA) to assure effective coordination, de-confliction and synchronization among all actors and in particular her/his allocated forces.

3. CHAPTER THREE – PRINCIPLES AND RESPONSIBILITIES

3.1 Introduction.

The main focus of MC 0593 is on interoperability[10] at the strategic and operational command level between the NATO provided DCIS and NFS provided CIS as well as non-NATO entities. Complementary detailed interoperability implementation guidance, including detailed test case specifications[11] has to be provided with separate documents, subordinated to this MC document.

Deployed C2 entities at operational command level (see Figure 2-1) receive NATO CIS support from a deployable CIS Point of Presence (PoP). A NATO provided PoP is composed of:

a. Capability Package NATO DCIS connectivity to the Wide Area Network (WAN) and the national network collocated with the PoP,

b. NATO C2 Services to match the required C2 functionality,

c. Local Area Network (LAN) infrastructure and user equipment provision varying in size according to the eligibility rules.

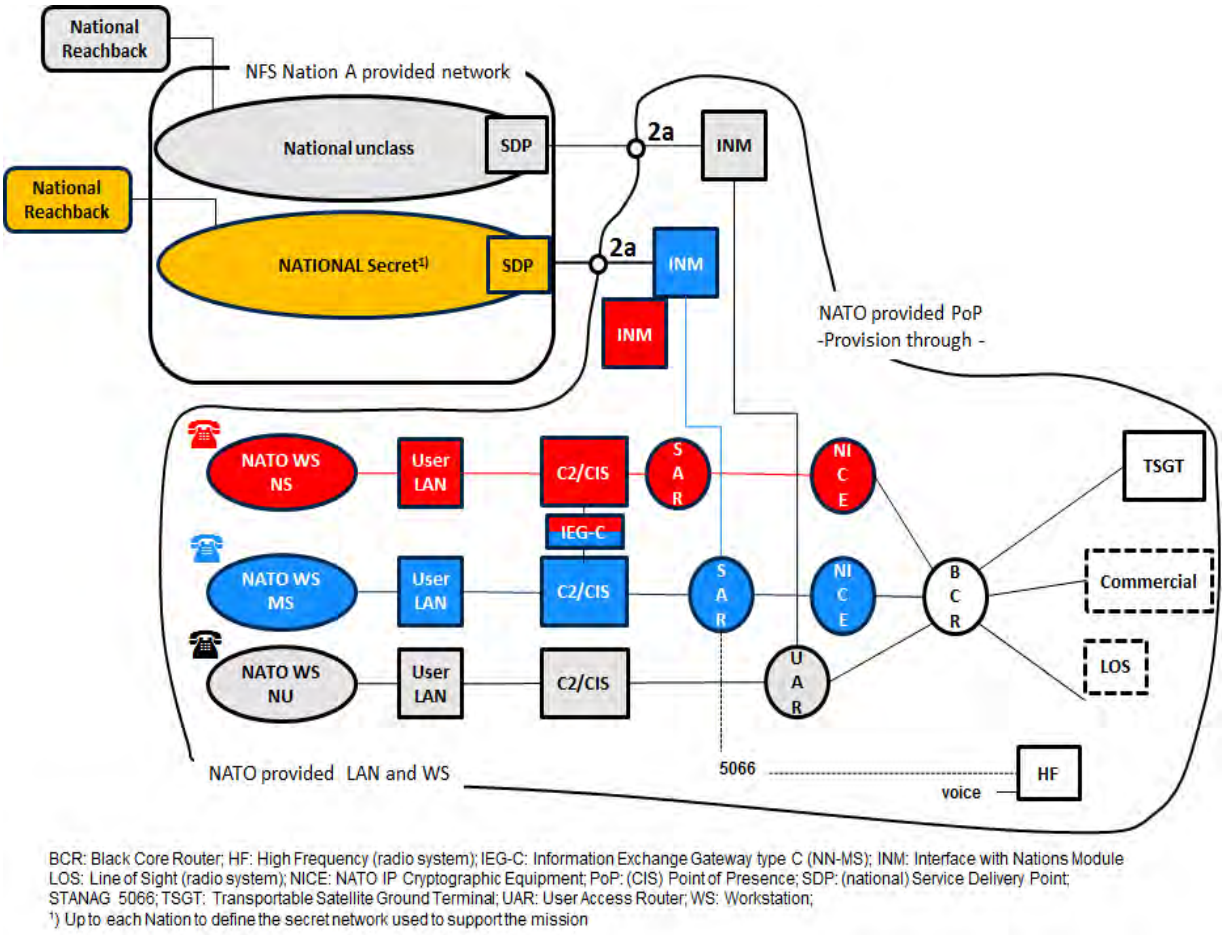
3.2 Responsibilities.

3.2.1 Across the NATO led mission templates as outlined in PG11, the following NATO provision principles apply:

a. NATO DCIS connectivity. A C2 entity that is eligible for NATO DCIS connectivity will be provided by NATO with WAN access and Interface with Nations Module (INM) capabilities, providing the NATO service interface to nationally provided CIS. NATO DCIS connectivity is provided to any C2 entity that qualifies for “Through” or “To” provision,

b. “Through” Provision. A C2 entity that is authorized “Through” provision will be provided by NATO with the required NATO C2 Services installed on site. A “Through” provision also includes the necessary LAN infrastructure and user equipment[12] across the whole C2 entity, see Figure 3-1. “Through” provision applies to C2 elements drawn from the NATO Command Structure.

[10] Interoperability is the ability to operate in synergy in the execution of assigned tasks (AAP-6).
[11] Currently provided in e.g. NC3A Technical Note (TN)-1174 (Reference F).
[12] An indicative number of eligible NATO users per C2 entity is provided with Reference G.



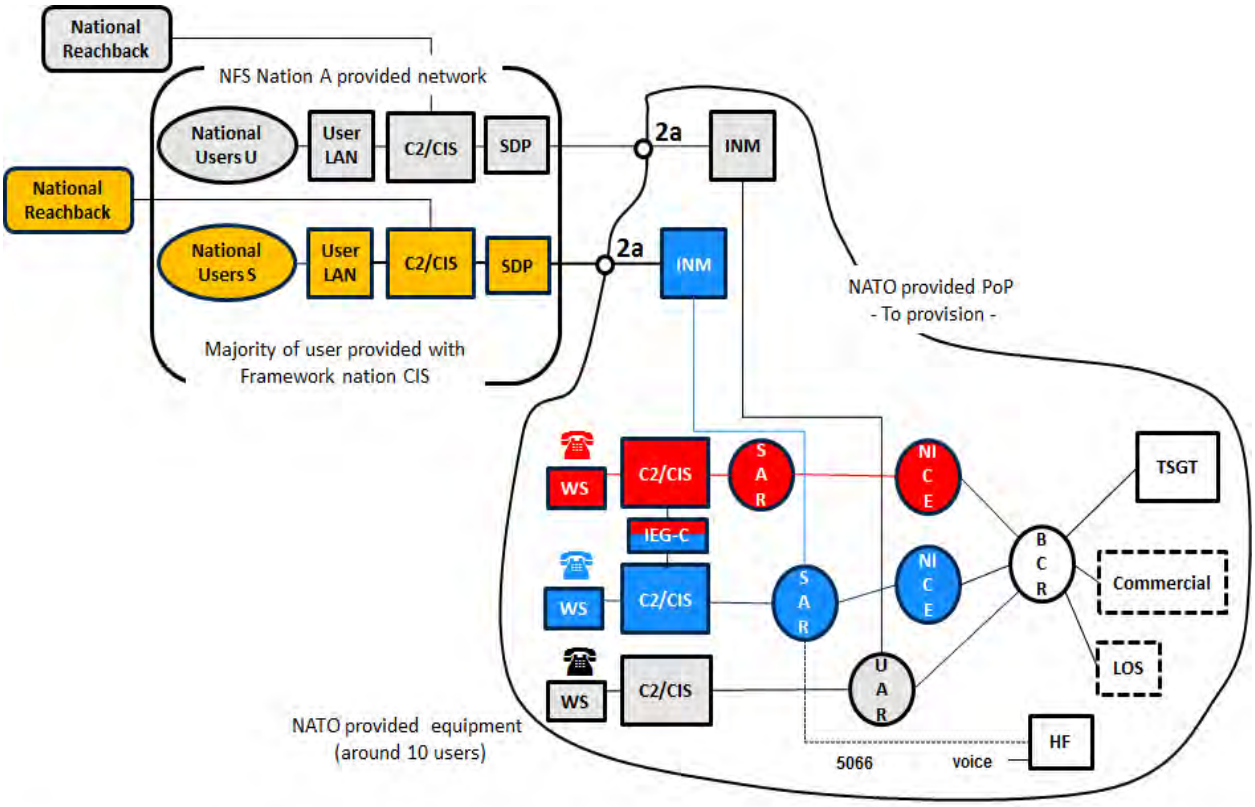
BCR: Black Core Router; HF: High Frequency (radio system); IEG-C: Information Exchange Gateway type C (NN-MS); INM: Interface with Nations Module
LOS: Line of Sight (radio system); NICE: NATO IP Cryptographic Equipment; PoP: (CIS) Point of Presence; SDP: (national) Service Delivery Point;
STANAG 5066; TSGT: Transportable Satellite Ground Terminal; UAR: User Access Router; WS: Workstation;
[1)] Up to each Nation to define the secret network used to support the mission

Figure 3-1: The “Through” Provision Principle

The scenario in Figure 3-1 also depicts the likely situation that while the main C2 element at a deployed location receives “through” provision, other (multi)national units collocated can receive access to NATO services from the C2 entity via an Interface with Nations Module (INM). National reach-back via the INM within the limitations of available resources can also be provided.

c. “To” Provision. A C2 entity that is authorized “To” provision will be provided by NATO with the required NATO C2 Services installed on site. A “To” provision is limited to a LAN infrastructure and user equipment in support of 10 active users, providing direct access to the NATO provided Core Enterprise Services (CES) and Community of Interest (COI) Services. The overall CIS infrastructure of the C2 entity is the responsibility of the Framework Nation/multinational entity, see Figure 3-2. “To” provision applies to C2 elements drawn from the NATO Force Structure[13].

[13] Note: “To” provision therefore also applies when a JTF HQ is drawn from the NATO Force Structure.



BCR: Black Core Router; HF: High Frequency (radio system); IEG-C: Information Exchange Gateway type C (NN-MS); INM: Interface with Nations Module
LOS: Line of Sight (radio system); NICE: NATO IP Cryptographic Equipment; PoP: (CIS) Point of Presence; SDP: (national) Service Delivery Point;
STANAG 5066; TSGT: Transportable Satellite Ground Terminal; UAR: User Access Router; WS: Workstation;

Figure 3-2: The "To" Provision Principle

d. "Augmentation" Provision. A C2 entity that is authorized "Augmentation" provision will be provided with the required NATO C2 Services that are considered over and above the national obligations (e.g. Afloat Command Platform (ACP) requirements that are in excess of equipment levels agreed in MC 0195).

3.2.2 NATO will provide the C2 Services on its backbone, interconnecting the C2 entities as depicted in Figure 2-1. At the operational command level NATO will ensure access to NATO C2 Services at each directly subordinate C2 entity location by providing appropriate connectivity and Interoperability Points[14] (denoted with number 2a in Figure 3-1 and 3-2). Nations and subordinate C2 entities are responsible to link their forces to the NATO provided Interoperability Points. As a consequence, they are also responsible for the information flow between the NATO Interoperability Point and their own forces.

[14] An Interoperability Point (IOP) defines the technical requirements for interoperability at a physical Interconnection Point between two networks to support one or more C2 Services across the Interconnection Point. The definition covers everything from low level physical aspects like connector type and transmission media via network protocols to session and application protocols and information standards. Where necessary, an IOP also comprises IA standards to be applied.

3.2.3 In the deployed operational and tactical environments, the same principle will apply between different Nations or C2 entities according to the hierarchical structure. The entity/National element higher in the hierarchy has to provide an IOP to the entity/national element lower in the hierarchy. More details are provided in section 3.3 below.

3.2.4 The overall C2 Service provision responsibilities are as follows:

a. NATO must implement the baseline C2 Services as described in Chapter 6 down to the Interoperability Points 2a at operational level to allow interconnection for Forces designated to support NATO-led operations,

b. These baseline C2 Services must also be implemented by NFS or partners-entities at Interoperability point 2a to support interoperability,

c. Nations and NATO may need to augment the baseline C2 Services with additional services depending on their force's operational role and the operational situation. This needs to be determined during the Force Generation Process,

d. For any given operation, or pre-defined multinational formation, the command structure and operating security levels must be defined and include all the forces that need to interoperate,

e. The responsibility for implementation lies with all forces, whether in a superior or subordinated role,

f. The superior level of command is responsible for providing Interoperability Points to its subordinated levels of command,

g. Each superior command will define a set of C2 Services (subset of the C2 Service Profile) mandatory for the mission execution,

h. The provisioning of end-to-end C2 Services across the Interoperability Points must be based on NATO agreed standards and profiles like NATO Interoperability Standards and Profiles (NISP),

i. The implementation of each set of C2 Services needs to be tested and evaluated by each superior level of command. All results are to be recorded prior to use in operational deployment, in accordance with the principles outlined in the NATO C3 Testing Policy (Reference H),

j. Operation and Maintenance (O&M) resources must be provided according to the provisioning responsibility at IOP level.

3.2.5 Meeting these responsibilities and requirements introduced above is pivotal to ensure that National and NATO force contributions are sufficiently equipped and organised to interoperate at least at a minimum level. Additional profiles might be defined to provide extended capability depending on the nature of the actual operational environment.

3.2.6 Under exceptional circumstances, a capability shortfall of a contributor can be mitigated for a limited period of time by sponsor support (NATO or Nation).

3.2.7 In addition, interoperability is crucial to support the information flows amongst all the actors in theatre and in the static environment, not only between NATO's Command Structure and its forces but also with all NFS and non-NATO entities. It is therefore essential that all involved forces support at least an agreed set of C2 Services. The C2 Services implementation at each Interconnection Point between the NATO Core Network and the other entities must be robust, secure, reliable and timely, as well as interoperable.

3.3 C2 Support Principles.

3.3.1 C2 Planning Support.

This paragraph provides indications necessary either to support procurement planning for CIS capability enhancement and follow-on equipment within given constraints or to assist operational planning.

a. Nations are to meet the minimum C2 Services standards outlined in this document and as defined in agreed and implemented NATO Standardization Agreements (STANAG) and Military Guidelines. All Nations are to assess their capabilities accordingly.

b. CIS support for national only use is not covered by this document. In situations where conflicts arise, NATO CIS will be given a higher priority.

c. A unit not equipped in accordance with this paragraph will not be excluded from consideration for a command function, however, the lack of adequate CIS capabilities will severely impact overall mission effectiveness.

3.3.2 Security Domains.

NATO led operations typically involve three main information security domains for NATO provided DCIS:

a. NATO Secret (NS) for information that is for NATO eyes only. The NS domain provides full functionality of some of the vital secure services to enable information exchange and other network functions with NATO commands and other NATO forces. Thus some IERs can only be achieved via access to the NS domain. However, its footprint in theatre should be minimized as much as possible and access to it should be achieved through Mission Secret domain,

b. Mission Secret (MS), like ISAF or KFOR Secret, where classified information can be shared with non NATO Troop Contributing Nations. Increasing NATO coalition operations indicate that there is a critical need to have information exchange mainly based on a mission oriented network, to enable some non-NATO entities to have access to mission critical C2 Services. This has to be considered together with the interaction with NS domain for NS critical information. A proper gateway in the static environment is required to allow minimizing the deployment of a separate NS infrastructure both at static HQ and in the deployed HQs. However, in support of autonomous C2 and to make

best use of scarce WAN transmission resources, in theatre gateways shall be considered where appropriate,

c. NATO Unclassified (NU)[15] for information exchange with external commercial of civil organisations, and for internet access[16],

d. Specific information classified higher than NS/MS can be transferred applying hyper encryption across NS/MS networks,

e. The number and classification of information security domains per mission depend on the type of operation and the partners and actors involved.

3.3.3 Secure and unsecure C2 Services within the different information security domains must be supported by an adequate CIS architecture. The services will be provided and tailored according to the mission requirements.

a. Generic Mission Planning in the NATO Secret Security Domain

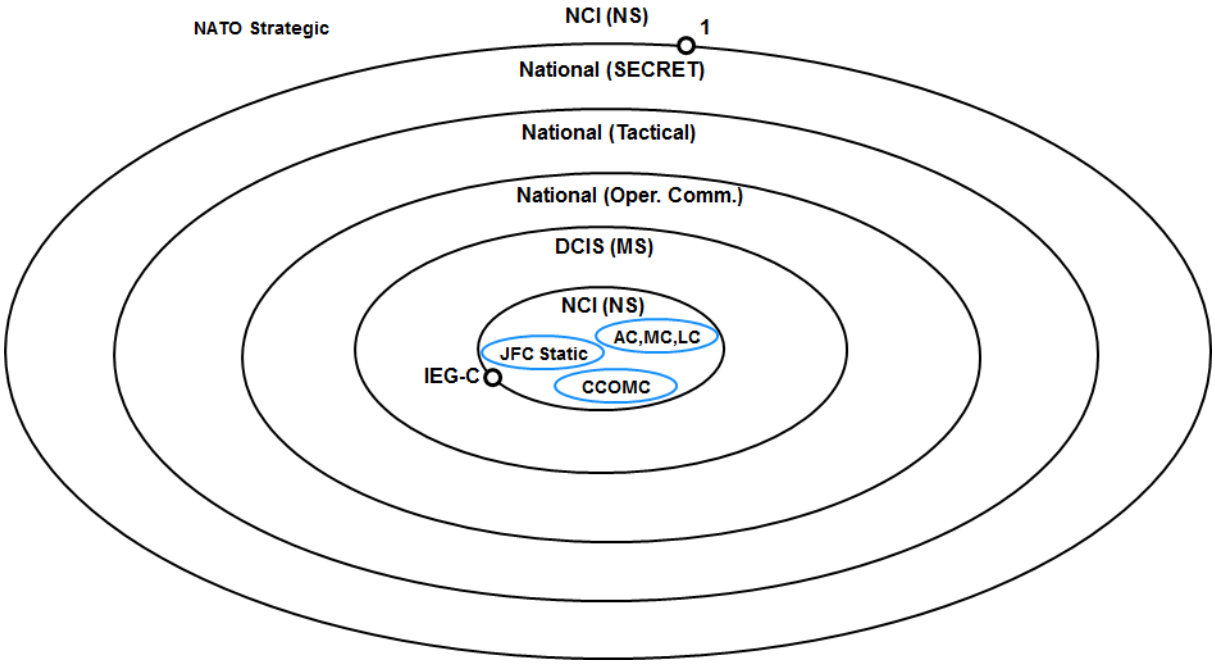


Figure 3-3: Generic Mission Planning in NATO Secret Security Domain

(1) The Primary information security domain for daily use in the static HQ locations is NATO Secret (NCI[17] (NS)). On that network, in particular, development and maintenance of generic mission

[15] Mission Unclassified (MU) should be used as the unclassified label if the mission is active.
[16] Currently the introduction of a NATO wide NATO Restricted (NR) business network is discussed. Providing such NR network in DCIS for NATO led operations would not require an additional information security domain infrastructure, but can be achieved by enhanced IA measures on the existing NU infrastructure.
[17] NCI: NATO Communications Infrastructure.

preparation templates and Standing Operating Procedures (SOP) is conducted. Figure 3-3 depicts that scenario.

(2) The Figure also depicts the various security domains foreseen for a typical NATO led operation. In the centre of Figure 3-3 the NATO Secret Strategic Network is depicted. The next layer (Operational (DCIS MS)) provides the NATO operated deployable Mission Secret Network. The next ring (National Operational) depicts national secret deployable networks in support of the operational command layer. Then a Tactical National network layer is represented, covering both deployable and mobile entities. That tactical layer is surrounded by the National Secret Strategic layer, assuming that national deployed CIS will be able to reach back into that network. The outmost shell represents again the NATO Secret Strategic Domain (NCI), already depicted in the centre of the diagram. Note that information exchange between NATO Secret and the various static national secret domains is provided via gateways in the static environment, depicted as Interoperability Point 1[18].

b. Mission Specific Planning in the Mission Secret Security Domain

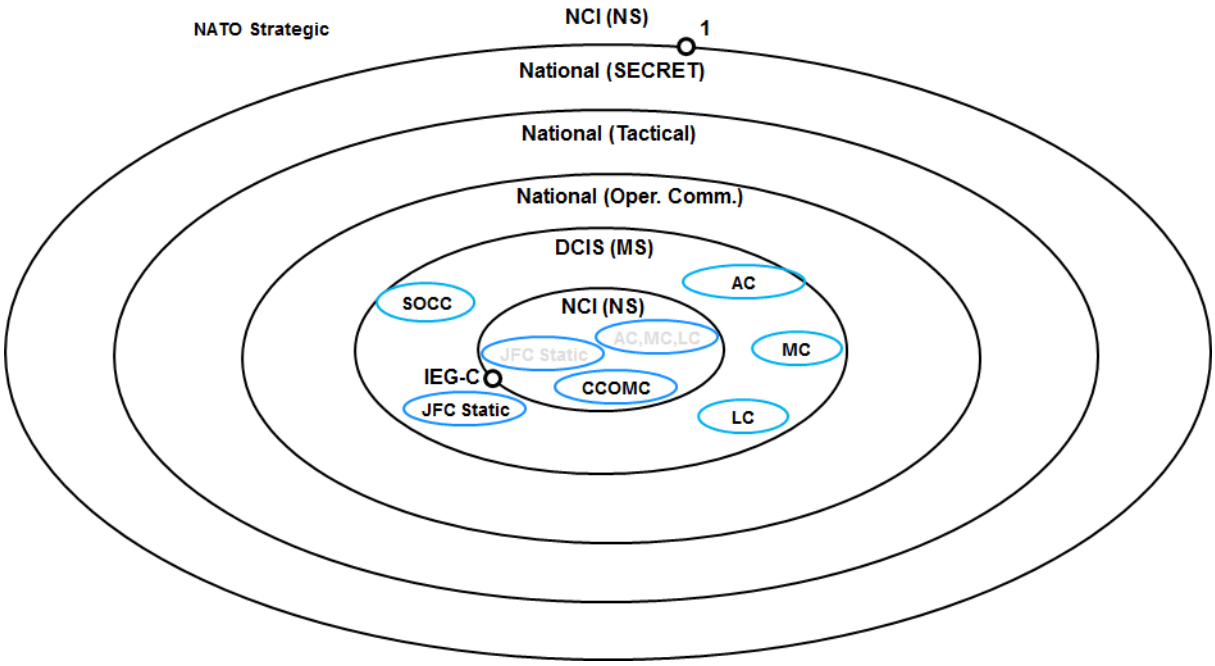


Figure 3-4: Mission Specific Planning in the Mission Secret Security Domain

To support a specific operation and the related training and exercise activities, Mission Secret (MS) will be the primary security domain to

[18] IOP 1 is outside the scope of this document.

support all coalition forces both in the static HQ and in the deployed HQ locations, as Figure 3-4 depicts. The MS domain will be provided by the DCIS infrastructure. To limit the risk of compromising the NS, only a very limited NS footprint shall be available in the deployed area in support of specific requirements (e.g. for specific Intelligence Services). In case of a specific mission[19], the related planning data shall already be generated and stored in the designated Mission Secret environment that can be deployed into theatre once the mission is activated.

Access[20] to each domain must be ensured in both static and deployed environments by implementing the appropriate technical solutions like Cross Security Domain Gateways, Virtual Security Domains on one single network, or ad hoc MS or NS remote users.

Cross security domain information exchange will require the implementation of a proper Information Exchange Gateway (IEG) between existing NS and MS domains (IEG-C[21] in Figure 3-4). The seamless exchange of information, the requirement for a minimized physical footprint and the ease of deployment must drive the necessary initiatives to amend the security regulations regarding information exchange across different security domains based on a risk management approach.

3.3.4 Interoperability.

Once the operational command level deploys, the other information security layers in Figure 3-4 are populated and forces and C2 entities are interconnected. Figure 3-5 depicts a deployment example and the associated IOPs.

With agreement that seamless information sharing is the goal, the challenge for the near term is for all Nations to be interoperable with NATO and amongst themselves. To achieve this level of interoperability, the CIS concept for deployed operations is the provision of a NATO backbone with the appropriate standard receptacles to allow interconnection between NATO and Nations at service level by means of appropriate gateways ensuring interoperability between the networks.

Within each security domain depicted in Figure 3-5, a network is connecting the various C2 entities and forces, resulting in a meshed topology within each layer. This is definitely the case for the NS Strategic and MS Deployable networks, while further down towards the Tactical Domain the grade of mesh decreases.

[19] That includes also NRF preparation.

[20] Access to any security domains required for an operation must be organized in line with the related applicable security regulations. Access does not necessarily imply the implementation of an additional physical infrastructure.

[21] IEG type C addresses gateway functionality to interconnect NS to MS, and shall also include mediation and proxy/processing functionality to support critical C2 services. More details see Ref. I.

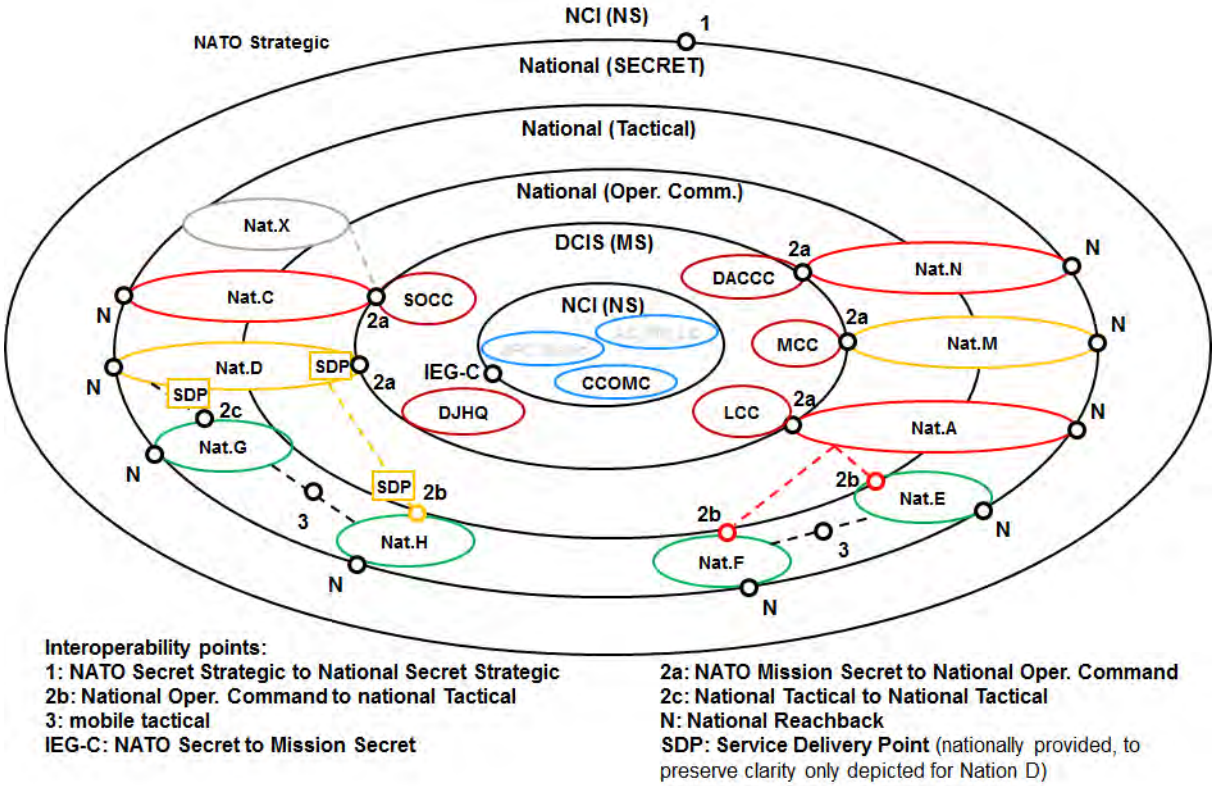


Figure 3-5: Overall View on Interoperability Points in a NATO Led Operation

Service interoperability and boundary protection gateways are required at the boundary between two layers with a different security classification. Figure 3-5 depicts the C2 Services Interoperability Points identified for a NATO led operation with Mission Secret as the primary mission information security domain. At each IOP, the principles and policies as outlined in the interconnection of network directive (Reference J) apply.

Interoperability Point 1 connects a NATO Secret static network to a National Secret static network. That Interoperability Point is part of the generic NATO C3 architecture, and therefore is outside the scope of this document.

IOP 2a allows the national deployed secret networks provided by forward NFS C2 entity to plug into the deployable Mission Secret domain, operated by NATO. The NFS C2 entity is fulfilling a lead/framework Nation function (e.g. as a component command or the logistics lead nation) at the operational command level of the mission.

At IOP 2b, the (multi-)national framework Nation C2 Services are interconnecting with C2 Services of a different Nation that provides tactical forces.

At IOP 2c, national tactical units of equivalent level are interconnecting laterally/transversally (e.g. battalion to battalion).

All IOPs 2a, 2b and 2c will also provide an unclassified level access to non-NATO entities for voice and core services.

IOP 3 is connecting mobile tactical endpoints via a radio through a radio interface which requires a common waveform supported by both radios to achieve interoperability.[22]

3.3.5 Organisational View of Interoperability Points.

Figure 3-6 reproduces the IOPs introduced in Figure 3-5 in a manner customized to represent the C2 chain of command. It also indicates which entity is responsible for the provision of C2 services. As a general principle outlined in AJP-6, the higher C2 entity is responsible to provide C2 services access to the lower C2 entity, and presents an IOP to the lower entity for interconnection. In turn, the lower entity is responsible to provide an Interoperability Point fully compliant with the IOP requirements.

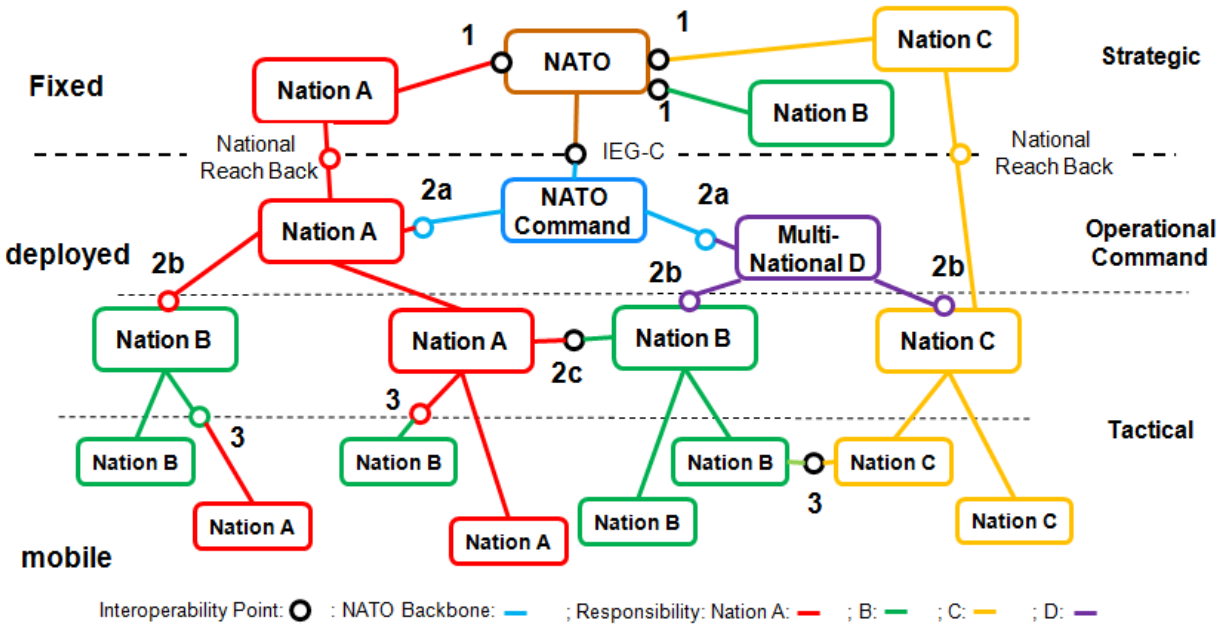


Figure 3-6: Organizational View of IOP: Who Provides What[23].

For NCS entities, NATO will provide all required C2 Services and the related IOPs 2a (see Figure 3-1 introducing “Through” provision).

For a NFS entity, NATO will provide all required C2 Services on the NATO PoP and the related IOPs 2a at the location of an eligible framework Nation located at Operational Level (see Figure 3-2 introducing “To” provision). The

[22] The Land Tactical User Group addresses standardization of NATO narrowband and wideband waveforms.

[23] Operation and Maintenance (O&M) resources must be provided according to the provisioning responsibility at IOP level.

framework Nation is obliged to present an Interoperability Point compliant with the IOP 2a service profile defined in Annex E.

For IOP 2b, the framework Nation is responsible to provide an IOP at the location of a subordinated C2 entity/force at Tactical Level. The subordinated C2 entity/Force is obliged to present an Interoperability Point compliant with the IOP 2b service profile. For example, multinational HQ D is obliged to provide an IOP 2b compliant Interoperability Point to the subordinated C2 entity/force provided by Nation C. Nation C is obliged to present an IOP 2 compliant Interoperability Point to interface with the one provided by multinational HQ D.

As a principle, distribution responsibility stops at the highest level of the subordinate national command. Staying with the above example, once multinational unit D and Nation C are interconnected through IOP 2b, further distribution of C2 Services to the subordinated Nation C units is the responsibility of Nation C.

When both units are on an equivalent level, the same Interoperability Point principle applies and is named IOP 2c. (see IOP 2c between Nation A and B in Figure 3-6). In this case, nations need to reach a mutual agreement regarding the location and the provision of the IOP 2c. It is recommended that in such a case the IOP service profile definitions are respected.

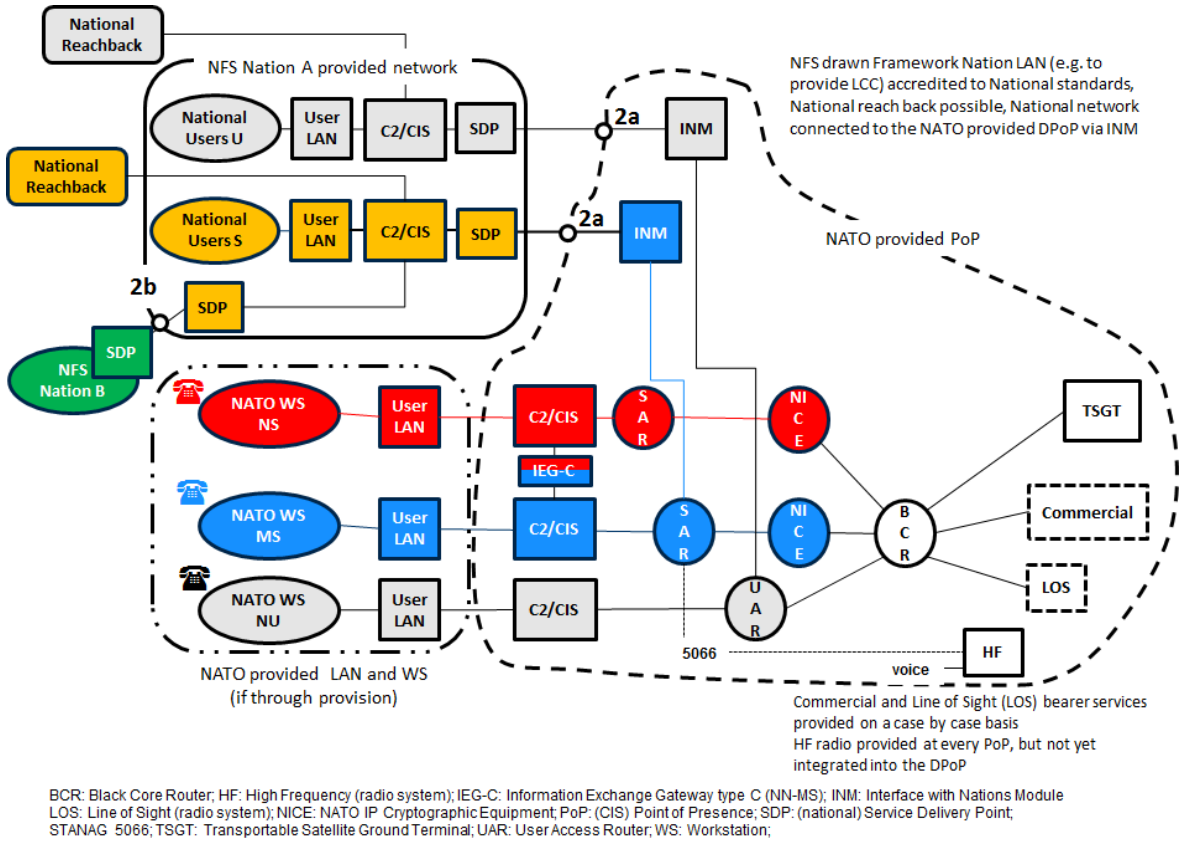
Regarding IOPs 2, it is assumed that a C2 Services baseline (see Annex E) will be implemented. However, since some interoperability requirements for individual C2 Services between two specific parties might vary, there will be a need to implement a complementary configurable C2 Service element. Figure 3-7 depicts that in more details.

Access to IOP 2a can also be granted to collocated national entities that are not strictly in the line of command. A decision on feasibility will be taken on case by case bases, pending technical and funding arrangements (see Nation X in Figure 3-5).

3.3.6 Configurable C2 Services Elements.

NATO has decided to use the Interface to Nations Module fulfilling the role of Configurable C2 Services Elements (including boundary protection functionality) at IOP 2a. As nations are recommended to implement a similar flexible concept, Figure 3-7 proposes a Service Delivery Point (SDP) functionality that allows adaptation of national provided C2 Services to NATO IOP 2 requirements. A flexible design assumed, nations are encouraged to use the same SDP to provide adaptation of their C2 Services across the various IOP 2 locations and variants (2a, 2b, 2c).

Interoperability Points with public telephony and internet services (open sources) and the NATO Unclassified domain will be provided at IOPs type 2, either via reach-back into the strategic domain or, where available, via local interfaces.



BCR: Black Core Router; HF: High Frequency (radio system); IEG-C: Information Exchange Gateway type C (NN-MS); INM: Interface with Nations Module
LOS: Line of Sight (radio system); NICE: NATO IP Cryptographic Equipment; PoP: (CIS) Point of Presence; SDP: (national) Service Delivery Point;
STANAG 5066; TSGT: Transportable Satellite Ground Terminal; UAR: User Access Router; WS: Workstation;

Figure 3-7: Configurable C2 Services Elements in Support of Interoperability Points 2

3.3.7 CIS C2 Arrangements When Deployed.

The Signal Support Group (SSG) (formerly known as Joint CIS Control Centre) will implement C2 Operational Control (OPCON) of all DCIS on behalf of the Theatre JFC Commander. The SSG's role is to act as the single in-theatre interface point for the management and operational direction of DCIS that is deployed in support of the mission. Its function includes coordination with host nation, government, non-government and international organizations to establish internal and external CIS for the Joint Task Force.

The various Component Command and framework nation heads of CIS interact with J6, and national CIS heads interact to the CIS heads of their superior command. The NATO DCIS assets in theatre are operated by the Deployable CIS Modules (DCM), a signals unit coming from a signal battalion. The DCMs report to the NATO CIS Group element. Figure 3-8 depicts these relationships.

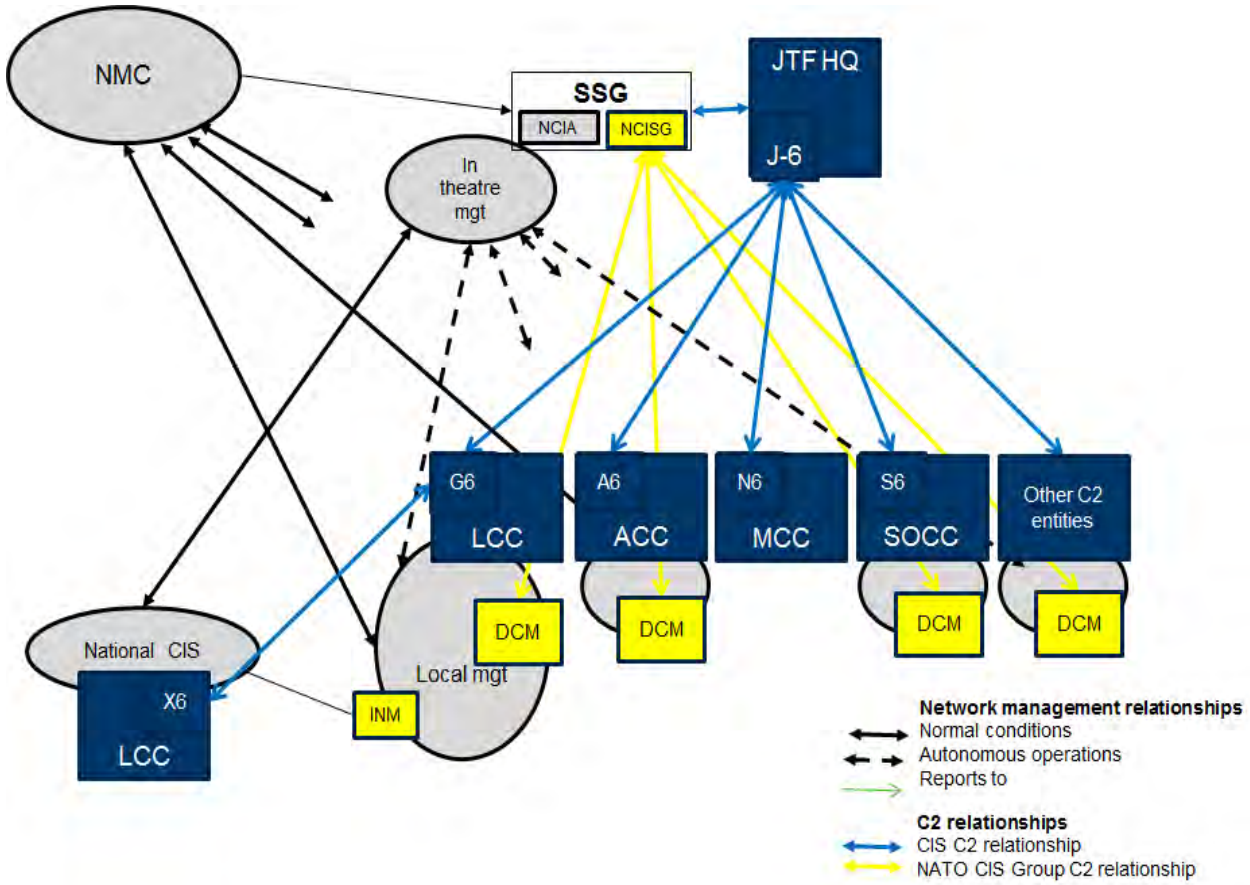


Figure 3-8: CIS C2 Arrangements in NATO Led Operations

Local management activities at DCM[24] locations are conducted by the DCM staff, overall network and service management is performed by the central Network Management Centre (NMC). The NMC provides status information in form of a CIS picture to the SSG in theatre. In case central NMC is not available and the deployment has to work in autonomous mode, the network management capability collocated with the SSG will conduct the necessary in theatre management activities, and create the CIS picture. In-theatre national CIS is reporting to the SSG.

3.4 Force and Interoperability Validation.

The overall CIS requirement verification process is part of the overall force validation and certification process.

The following pivotal activities are requested for DCIS and related C2 Services certification[25]:

[24] DCM: Deployable CIS Module: NATO Signal unit and their CIS equipment to operate a NATO Deployable PoP.

[25] Considering these high level principles, more guidance regarding the CIS certification process and technical details will be developed as part of the TN 1174 revision process.

a. It is expected that NATO and Nations are performing internal evaluation and pre-certification against the requirements set forward in this document,

b. In the next step, it is expected that NATO and Nations are testing their systems against a NATO validated technical evaluation platform, e.g. Interoperability Experimentation Testing and Validation (IETV) (including DCIS evolution platform) or equivalent (multi) national evaluation systems,

c. In addition, it is recommended to conduct multinational system technical interoperability tests at interoperability test events/exercises (e.g. CWIX[26] or COMBINED ENDEAVOUR),

d. The final certification of C2 Services support validation will be conducted during CIS preparation exercises (e.g. STEADFAST COBALT),

e. Nations are encouraged to regularly participate in DCIS interoperability test events, even not part of the upcoming force generation.

[26] CWIX: Coalition Warrior Interoperability eXploration, eXperimentation, eXamination, eXercise.

4. CHAPTER FOUR – DEVELOPMENT OF INFORMATION EXCHANGE REQUIREMENTS FOR NATO LED OPERATIONS

In AJP-6 (Reference K) Information Exchange Requirements (IER) are defined as follows: *Those categories of information that must be exchanged between operational facilities to provide commanders with essential information for decision-making*. The NATO process for specifying IERs, including managing their configuration, is described in APP-15 (Reference L).

Applying AJP-6 guidance, over the last couple of years a comprehensive list of information exchange requirements in support of NATO NRF exercises and NATO led operations have been developed, and are used as inputs to this document. For example, AMN implementation has identified a relationship between IERs and Mission Threads.[27]

4.1 Information Exchange Requirements in support of Command and Control.

Information superiority is considered to be a key factor to achieve success in NATO and coalition operations.

The process of executing operational functions and obtaining C2 products, services and applications in a timely manner between deployed and static elements is essential. Decision makers require automated C2IS capabilities to effectively plan, execute and monitor operations in a responsive and timely manner.

The required information exchange will involve exchanging data between multiple HQs and multifunctional staffs, and among different security domains (Reference M). Systems' interoperability and authorizing data flow between different security domains is one of the critical pre-conditions for mission success.

The Information Exchange Requirements for NATO Expeditionary Operations are described in more detail in Annex D. The CIS Interoperability Requirement Tables presented in Annex E define C2 profiles in support of each IER. IER and corresponding CIS entries are then applied to each of the C2 elements depicted in Figure 2-1.

4.1.1 Information Exchange Environment.

Within a joint battle space operations are generally complex. This complexity is compounded by the fact that different Services (Land, Maritime, Air, Special Forces, Logistics …) will be stationed, operate or cooperate.

Information Exchange Requirement.

a. The IER highlights the user requirement for information sharing and therefore the C2 Services interoperability and CIS connectivity throughout the scope of operation,

[27] A comparison between IER and Mission Threads is presented in Annex H.

b. IERs define the required types, update frequency and characteristics of information flows between C2 entities,

c. A shift from “Need to know” to “Need to share” is required. Full IER mapping identifies what information HQs needs to share (receive and disseminate) in order to make timely and appropriate decisions, and to assure that those decisions are effectively implemented,

d. IER management ensures that HQs operate effectively among a force.

4.1.2 Information Exchange with non-NATO Entities. Recent doctrines, concepts and best practices, recognize that the spectrum of relations between forces and civilian authorities, populations, organizations and agencies is complex, but also emphasize that to prevent or resolve crises/conflicts, operations require enhanced interaction and information exchange between NATO and non-NATO entities.

4.1.3 Types/Categories of Information to be exchanged. There are a number of different types of information products that need to be exchanged in any operational context. Although some information exchange requirements might be specific for each category of operation, most of them are common to all kinds of mission. These types of information can be broken down into the following categories:

a. Orders, directives, and plans (including overlays),

b. Situation awareness to include friendly, enemy, and neutral (civilian) forces and environmental information to include meteorological information,

c. Information on control measures (including control orders), as well as control returns and information,

d. CIS and Combat Service Support (CSS) information,

e. Reports,

f. Specialist information regarding battlefield functional areas such as artillery, engineers, aviation and others.

5. CHAPTER FIVE – COMMAND AND CONTROL SERVICES IMPLEMENTATION

5.1 Functional Services / Community of Interest Services.

5.1.1 Functional Services (FS) are tools that provide support to a specific staff function, service, or process. For instance, a functional service could be a decision support tool, a planning tool, or any other type of capability required by the staffs. A functional service will, in general, be orientated towards a specific staff function such as intelligence or logistics. However, its implementation must take into account the complete staff process that is not necessarily constrained by organizational boundaries. For instance, while a particular functional service might support joint operations or transport/movement planning, it must also recognize and support lateral relationships with other mission areas thereby avoiding the development of stovepipe sub-systems. [AJP 6]

5.1.2 The C3 classification taxonomy introduces user applications and Community of Interest (COI) Services to describe what is currently understood as FS (e.g. see AJP-6 above). Figure 5-1 depicts the user applications and COI services identified in Reference E. COI services rely in on Core Enterprise Services (see 5.2) and Communications Services (see 5.3) for end to end information exchange.

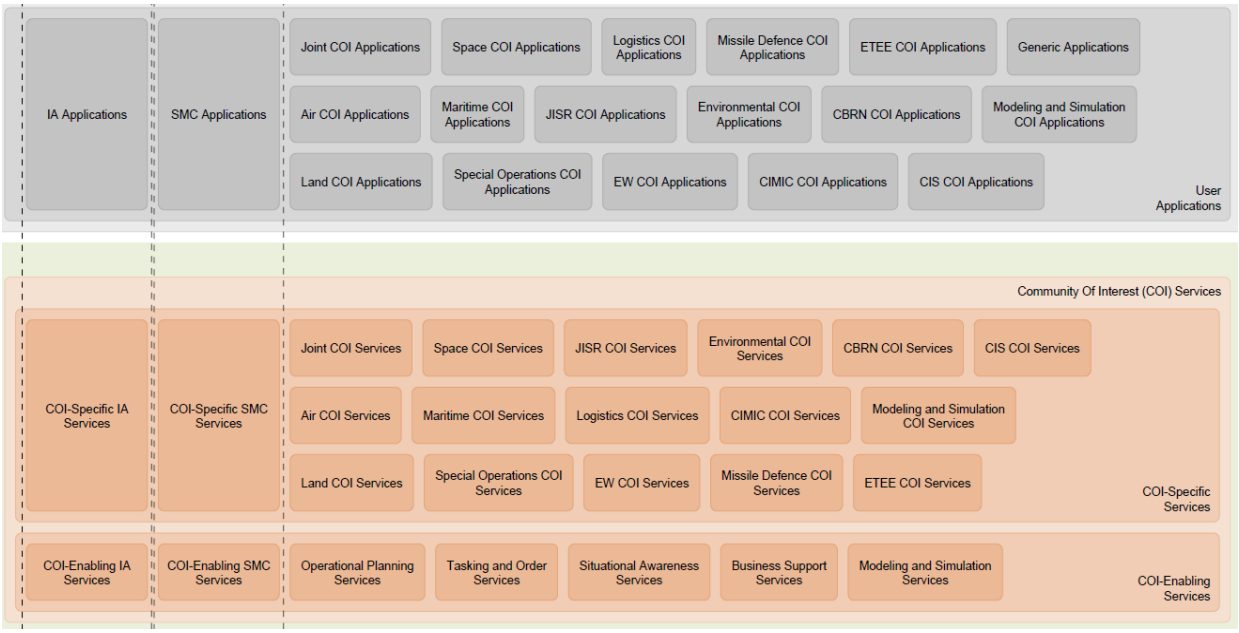


Figure 5-1 User Application and COI Layer of the C3 Classification Taxonomy

Dependent on the specific mission type and the C2 entity a PoP is assigned to, the operational needs might require the complete suite of user applications and COI services, or just a subset thereof to be available in the PoP. Therefore, the DCIS infrastructure supporting NATO led operations must be flexible and scalable to run and operate any combination of the applications and COI service that the specific C2 element requires.

5.1.3 It shall be possible to host all mission relevant services and related information in each deployable C2 entity.

5.1.4 A national provided C2 entity might, depending on its C2 function, have access to some or several COI services.

5.1.5 Figure 5-2 depicts the technology layers used in the NATO DCIS micro Information Services Module (µISM), and maps them to the corresponding layers of the C3 classification taxonomy. A µISM is designed to host all COI and Core Enterprise services in a NATO deployable PoP.

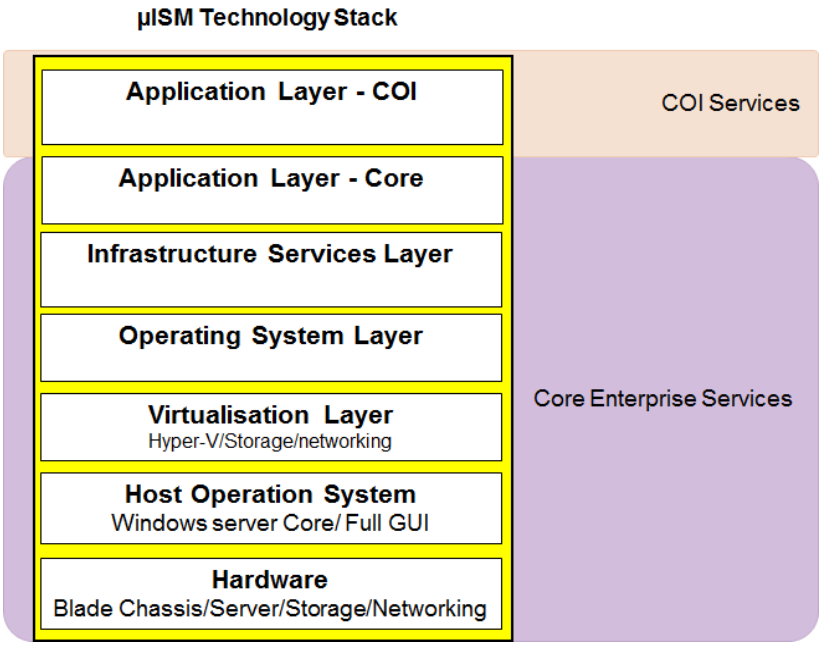


Figure 5-2 Technology Stack in the NATO DCIS µISM

5.1.6 The µISM is part of the DCM provided PoP. The DCM troops will look after the physical condition of the µISM, ensure that all Core Enterprise Services are available, and that virtual servers for COI service applications are operational. However, it must be noted that DCM troops neither have the mandate nor the capability to manage the COI applications themselves. The COI communities shall provide the COI application expertise when and where needed.

5.2 CES/Core Enterprise Services.

5.2.1 Core Enterprise Services (CES) are tools that provide generic computer information processing functionalities to the user (e.g., directory, file storage, printing, e-mail, and web hosting services) [AJP 6].

5.2.2 The C3 classification taxonomy distinguishes the CES layer into three sublayers: Enterprise Support Services, SOA Platform Services and Infrastructure Services, see Figure 5-3. These CES will also be implemented in the NATO DCIS µISM as already shown in Figure 5-2.

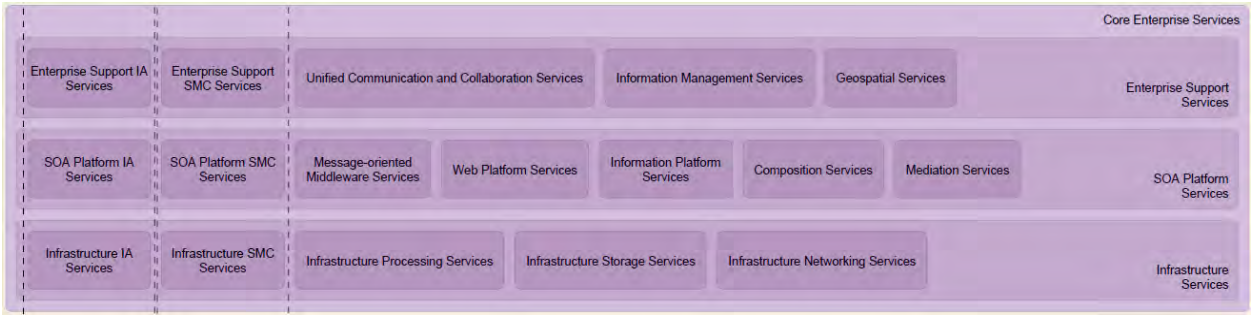


Figure 5-3 Core Enterprise Service Layers of the C3 Classification Taxonomy

5.2.3 CES will be installed and operated in all NATO DCIS PoPs, and will be operated and maintained by the DCM troops. Central management and configuration support will be provided from the strategic environment.

5.2.4 National provided C2 entities also require CES support.

5.3 Communications Services.

5.3.1 Communications services are the services provided by the communications systems, related mainly with the transfer of information directly from user to user by conventional means not related with computer terminals (Voice, Fax, and Video Tele Conference (VTC) [AJP 6].

5.3.2 Figure 5-4 introduces the communication services layer of the C3 classification taxonomy. The Communication Access Services layer introduces the various user facing communication access services, also called Customer Edge Services. The Transport Service layer contains the various end-to-end transport services that can be applied to link the access services to the transmission services. Finally, the Transmission Services layer contains the transmission services available to support local and wide area networking.

Figure 5-4 Communications Service Layers of the C3 Classification Taxonomy

5.3.3 The communications services layer is an element in any deployable C2 entity. Depending on the size and type of C2 entity a tailored subset of Communication Access, Transport and Transmission services is required.

5.3.4 DCIS Connectivity and related WAN transmission services.

a. Figure 5-5 depicts the high level principle of NATO CIS connectivity in support of Land Based operations, and introduces the typical type of CIS C2 entities involved. On the left hand side, the deployable entities are represented: A NATO provided HQ with through provision, a C2 entity supported with NATO to provision, and two national deployed CIS. The fixed (strategic) elements on the right hand side show pivotal DCIs support functions, i.e. a DCIS garrison site (for on the job training, O&M and mission preparation), the central element of the DCIS service and network management, and a services gateway between DCIS and the NATO General Communications System (NGCS).

b. This services gateway provides access to the NATO and national strategic networks, and via an Internet Services Gateway (ISG), located in the NGCS, access to the internet/public networks, through which communications with external mission players, e.g. International Organisations and Non-Governmental Organisations, can be established. Dependent on mission duration and in theatre service availability, forward deployed ISG can be installed.

c. Connectivity between entities in the fixed strategic environment is provided with transmission services provided by CP0A0104. Connectivity into the deployed environment is mainly provided with SATCOM services provided under CP0A0130, consisting of a space segment and Satellite Ground Stations (SGS). The SGS anchors the deployable SATCOM transmission into the strategic fixed network infrastructure. CP0A0149 provided Transportable Satellite Ground Terminals (TSGT) anchor the SATCOM bearer into the deployable HQ infrastructure.

d. In addition to NATO provided TSGTs other SATCOM terminals of opportunity can also be used (e.g. national). Similarly, SATCOM bandwidth can be provided by NATO core capability or by commercial providers.

e. For generic mission planning, local or host nation support cannot be assumed, therefore it is assumed that the initial deployment will fully rely on SATCOM capability.

f. To increase planning options for theatre internal communications, an adequate mix of additional transmission bearer services is required, including long range and short range line of sight technology and troposcatter systems. In case of host nation or commercial service support in theatre, leasing of transmission services must also be supported.

g. Other wide area transmission services required to support NATO led operations are Tactical Satellite Communications (TACSAT) and High Frequency (HF) radio systems.

h. All the above WAN transmission services will be provided by NATO. Therefore, no WAN transmission interoperability requirement exists with National units connected at Interoperability Point 2a in Figure 5-6.

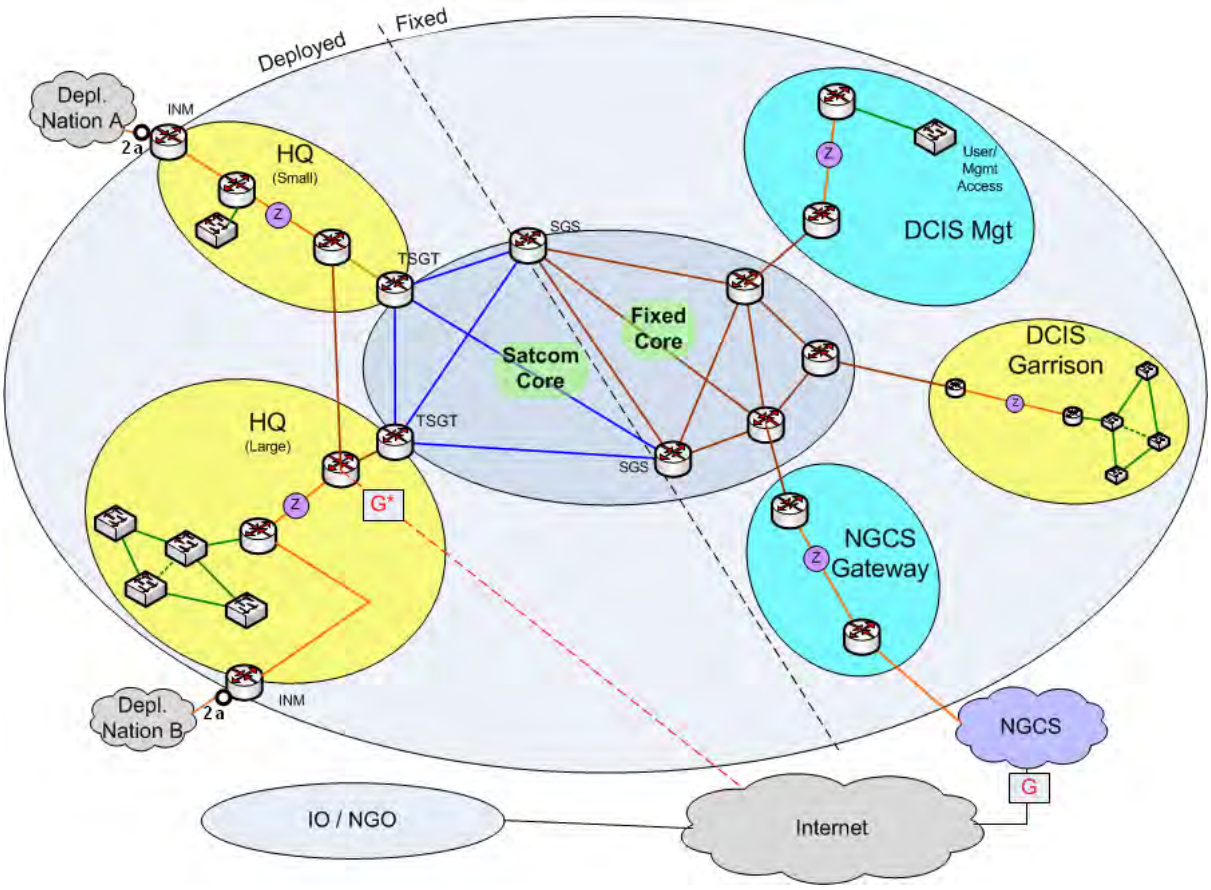


Figure 5-5: High Level Communication Layer Principle of NATO CIS Organization in a Land Based operation

In the scope of Federation of Networks, NATO and Nations must be prepared for increased bandwidth requirements for resiliency purposes, to cover failover traffic from other federation members.

Each DCIS PoP can provide a NATO Backbone network access to collocate national deployed networks via the INM.

Robust, effective and efficient communications networks form the foundation of any information sharing capability. Underlying networks should be capable of supporting different communities of interest and their specific security requirements. This may require separated security domains, but ideally they are running over a common infrastructure.

5.4 DCIS Points of Presence (PoP).

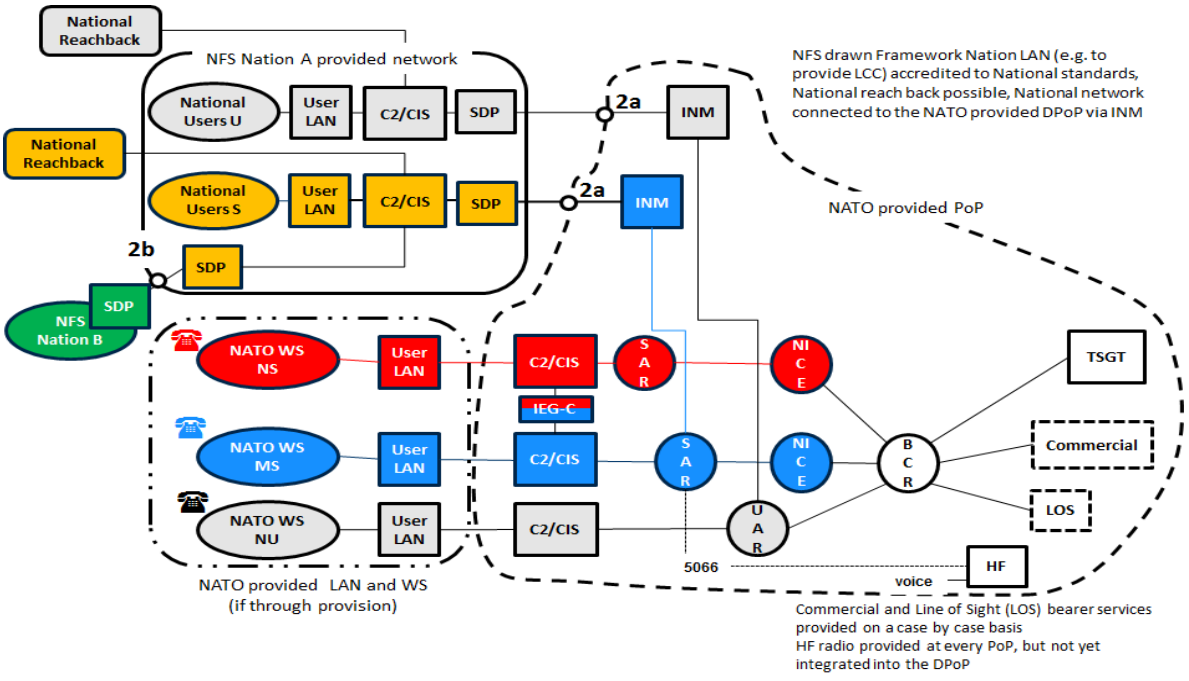
A DCIS PoP is the core of the deployed NATO network. Figure 5-6 is showing the generic building blocks of a DCIS PoP. It is providing, according to the eligibility of the HQ, the NATO physical footprint for three security domains (NATO Secret, Mission Secret and Unclassified). Any DCIS PoP supporting a deployable C2 entity provides Bi-SC Core services

and FS server infrastructure. Instances for network and service management must also be provided, depending on the C2 functionality assigned to the PoP. External interfaces are provided for the WAN access and as local Interconnection Points to the collocated national deployed networks via INMs. A PoP providing support throughout the HQ entity includes LAN distribution capabilities and all end user equipment. A PoP providing support to a HQ only provides a limited number of end user equipment and the limited LAN capability to support the small number of users.

The Black Core Router (BCR) connects the PoP to the WAN transmission services. An Access router connects each of the three local security domains to the BCR. In case of the NU domain, the User Access Routers (UAR) connects directly to the BCR, for NS and MS domain the Secure Access Routers (SAR) is connected via a NATO IP Encryption Equipment (NICE).

The C2/CIS block contains all Core Enterprise and COI service blocks (servers, storage area networks, backup etc., see Figure 5-2). To keep clarity, most Information Assurance and all SMC elements have been omitted from the drawing.

Figure 5-6 shows how a C2 entity provided by the NATO Force Structure (national/multinational) is connected to a NATO provided DCIS Point of Presence (PoP). It is assumed that the NFS element from Nation A will provide one secret and one unclassified domain, and might have national means to provide connectivity back into the national strategic network. Furthermore, that NFS entity provides CIS support to tactical elements of Nation B.



BCR: Black Core Router; HF: High Frequency (radio system); IEG-C: Information Exchange Gateway type C (NS-MS); INM: Interface with Nations Module
LOS: Line of Sight (radio system); NICE: NATO IP Cryptographic Equipment; PoP: (CIS) Point of Presence; SDP: (national) Service Delivery Point;
STANAG 5066; TSGT: Transportable Satellite Ground Terminal; UAR: User Access Router; WS: Workstation;

Figure 5-6: Interconnection of a NFS Component Command Framework Nation to a NATO Provided DCIS (same as Figure 3-7, repeated to preserve clarity)

5.5 Gateways in NATO led operations.

a. Connectivity to networks of National deployed units via the INM: The Interface with Nations Module (INM) is a generic deployable gateway device that can be tailored to meet the service and Information Assurance requirements to connect to collocated national networks. Services that can be provided across the INM include voice, VTC and all kinds of data services. Every DCIS PoP shall provide an interconnection point for National networks. The INM is the instantiation of the Interoperability point 2a in Figure 3-5 and 5-6. One INM shall be able to host one national forward deployed network.

b. Interface Exchange Gateway-type C (IEG-C): The need for a gateway between NATO Secret and Mission Secret has been briefly introduced in Chapter 3. Figure 5-6 depicts a local IEG-C installed in a deployed DCIS PoP. This default installation is currently required since a reasonable amount of C2 services are still provided in NS, while most C2 services already operate in the MS domain. A local IEG-C also avoids that local traffic between the NS and MS domain of the HQ has to travel across the WAN to the next or central IEG-C in another location. Ultimately, all C2 services used in the deployed environment should work in the MS domain. Once that is achieved, the best location for an IEG-C is at the boundary between the deployable MS domain and the Strategic NS domain. The IEG-C shall support cross domain flows for all COI and Core Enterprise services applied in NATO led operations.

c. NGCS gateway: The NGCS and the DCIS are implemented by different projects and at different points in time. Therefore service implementation is not identical in both components. Main differences are in the provision of some Core Enterprise services, and in the implementation of communication transport services. In addition, for Information assurance purpose, the NS in the strategic component and the NS in the deployable component constitute two different domains. Therefore, a DCIS-NGCS gateway is required to interconnect the two components.

d. Internet Services Gateway (ISG): The internet services gateway provides connectivity between the NATO unclassified network and the internet. In the initial phase of a deployment, deployed users will be provided with internet access via reach-back into the NGCS, and usage of an ISG in the strategic environment. In later phases of a mission, and circumstances permitting, local in-theatre ISG might be established and utilised.

e. IEG-D: an IEG case D, connecting NS to the NR/NU domain might be required to support NATO led operations. Use cases are:

(1) Upload of public information from NU/Internet into the secret domains, e.g. via an information diode,

(2) Bi-directional exchange in support of logistic, medical, PsyOps, CIMIC or other requirements in response to the needs of a CA,

(3) Finally, bi-directional exchange of network and service management information is pivotal to ensure optimal usage of the scarce transmission resources in a deployed environment,

(4) Solutions for (2) and (3) are currently under investigation.

5.5.1 Communication with Non-NATO Entities.

In particular, specific inter-domains solutions must be implemented to ensure information exchange with non NATO entities:

a. Information exchange with non-NATO partners like Non-NATO Nations or Non-NATO Multi-National Forces will be fulfilled by providing access to the Mission Secret domain,

b. Information exchange with non-NATO entities like Contractors will be fulfilled by providing access to the relevant data needed to conduct their duties, subject to National policies as found applicable,

c. Information exchange with Governmental Organisations, Host Nations and International Organisations will be fulfilled by providing access to NATO Unclassified domain and/or additional Community of Interest domain (e.g. VPN …),

d. Information exchange with Non-Governmental Organisations can be fulfilled by providing access to NATO Unclassified domain.

5.6 Information Assurance aspects for NATO led Operation.

Information Assurance is a vertical group in the C3 classification taxonomy, covering all layers from communications equipment to business processes. This part summarises the IA principles that apply to this document, and assigns related responsibilities.

5.6.1 Principles applied to NATO Deployable CIS.

a. In support of NATO's vision to provide secure networking and information infrastructures, DCIS will be subject to the secure end to end services and information assurance principles and policies extant within NATO (Reference M and N).

b. Security has to be built into each security domain so that accreditation of the system as a whole can be achieved.

c. The DCIS system is a deployable system therefore, by definition, for use in the field. In its physical form it consists of mobile platforms and other movable packages of equipment which may be deployed in tents or in buildings of opportunity. The security of the equipment and the data it processes and transmits will be ensured by a mixture of methods: physical, procedural and technical.

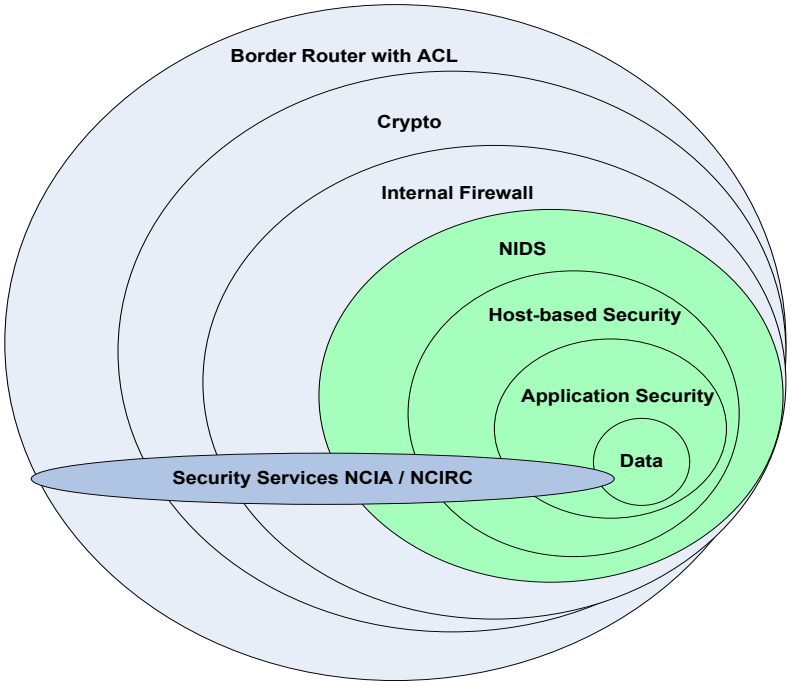


Figure 5-7: DCIS Security Architecture

d. In order to meet the Security Requirements, the DCIS Infrastructure has a layered defence in depth security architecture, see Figure 5-7 above, comprising of the following components:

(1) Information labelling (Protective marking),
(2) Self Protecting Node,
(3) Firewalls,
(4) Encryption,
(5) Network Intrusion Detection System (NIDS),
(6) Access Control (including IA and DAC),
(7) Host Intrusion Detection System (HIDS),
(8) Content filtering for NS/MS Connection,
(9) Anti-Virus/Anti-Malware,
(10) Device control,
(11) Accounting and Audit.

e. The security countermeasures deployed in DCIS are designed to be replicated in each security domain so that flexibility in deployment can be achieved. If a particular operation requires only NS, MS or NU or any combination of these elements, the DCIS security architecture is designed in such a way that security will not be adversely affected.

5.6.2 NATO DCIS Security Accreditation in Preparation of Immediate Deployment.

a. From a Security Operations perspective, because of the deployable nature of DCIS and the need to meet short notice to move requirements, it is imperative that all security countermeasure and

controls are implemented prior to deployment. Figure 5-8 provides details on short notice security accreditation use case.

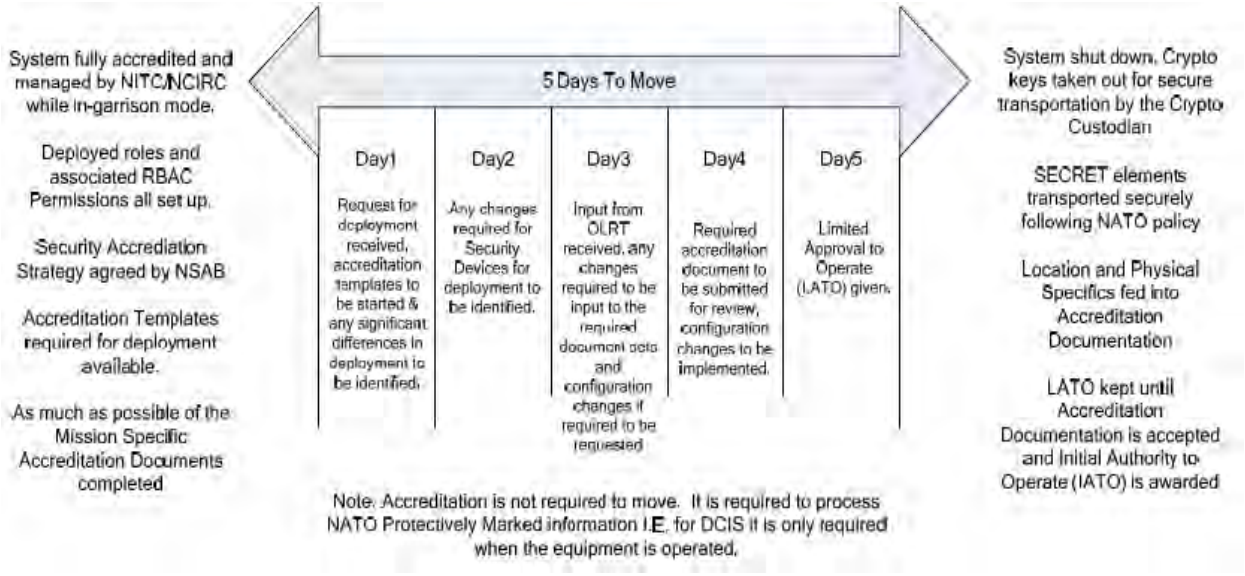


Figure 5-8: Security in Support of short Notice to Move

b. In order to meet this requirement DCIS shall be accredited and operated whilst in garrison connected to the Mission Anchor Point. NATO Signal Battalion (NSB)/DCMs shall operate the system as if it was deployed.

c. In preparation of certification events and exercises (e.g. NRF/FMN CIS or Command Post Exercise), a specific event security accreditation request has to be prepared to obtain event related security accreditation. Derived from that process, generic accreditation paperwork for real mission deployment shall be prepared, covering all details required but the details on the local security environment.

d. That way during actual mission planning only information on mission type and locale security environment needs to be added.

e. There is a requirement for DCIS to be able to operate autonomously for a period of up to 24 hours. IA processes have been developed accordingly.

5.6.3 NATO Forces Structure CIS.

a. Following the same principles outlined for NATO DCIS above, CIS operated by the NFS should be kept fully patched, the cryptos keyed with operational keys, NIDS/HIDS and anti-virus signatures kept up to date and NIATC (or national equivalent) security settings applied, etc. That way, NFS CIS shall have permanent National security accreditation.

b. During preparation of a force certification event (e.g. NRF/FMN CIS or Command Post Exercise), the national CIS shall prepare and submit all relevant information to NATO operation and accreditation authorities (circuit requests, security accreditation paperwork, etc.). Like for DCIS,

this certification event specific accreditation material shall be used to generate a generic mission accreditation request, to be completed once mission type and local security environment details are known.

5.6.4 Information Exchange in Support of CIS Security and Cyber Defence.

a. Existing NATO information assurance doctrine and policies, together with specific recommendations from the risk assessment and security accreditation process, will generate a set of instructions to be followed and applied to operate the NATO and National CIS.

b. In addition to the above, it is expected that CIS security and Cyber Defence related information is exchanged between NATO CIS and National CIS across Interoperability point 2a, and between the various NFS CIS at Interoperability points 2b and 2c.

c. Currently work on type and structure of messages and the processes and procedures to exchange them are under study. It is, however, anticipated that the set of messages will include:

(1) Standard incident messages,
(2) Summary and status of attacks, including on-going attacks and suspected intrusions,
(3) Updates on threats,
(4) CIS network and Security status information,
(5) Newly detected or published vulnerabilities of a system in operation, etc.

d. The Protected Core Network (PCN) approach is developed to address the NATO need for high-availability interconnections between classified information systems operated by NATO and Nations. PCN defines standardised federated connections with built-in protection features to offer optimal service for authorised traffic conforming to agreed service levels, whilst protecting the network from unauthorised use. The PCN interoperability specifications are under development. Once finalised and agreed, both NATO DCIS and National DCIS shall comply with the PCN interoperability specifications.

5.7 DCIS Service Management and Control.

Service Management and Control is a vertical group in the C3 classification taxonomy, covering all layers from communications equipment to business processes. The high level principle and the C2 relationships for in theatre CIS have been introduced in Chapter 3. The following will provide the key aspects on how SMC is obtained within the NATO part of the deployed CIS. SMC requirements and processes for federated CIS are currently under study, and will be added in Annex G of future MC 0593 editions.

5.7.1 Deployable CIS Operation in Garrison.

DCIS equipment in garrison shall be connected to the network, with Core Enterprise Services running in all three security domains. That allows the distribution of system and security patches and updates, and supports training on the job activities.

For DCIS equipment on short notice to move, e.g. DCIS assigned to NRF in standby, also COI enabling and COI services shall be installed and operational, supporting the generic C2 services requirements of the C2 entity (e.g. LCC or DOB) that the specific PoP will support upon deployment. Furthermore, all applicable IA tools and processes shall be active.

Management of the services, including IA, will be conducted by the central Network Management Centre, and DCM personnel will perform local O&M activities in support of the NMC.

The DCM will provide full support to Communications and Core Enterprise Services, and ensure that virtual servers for COI service applications are operational. COI Service management shall be provided by the different COIs.

5.7.2 Deployable CIS Operation When Deployed.

When the notice to move is given, DCM will prepare the DCIS PoP for deployment. Applying the procedures outlined above will allow the DCM to meet the notice to move targets.

Upon arrival in theatre, services will be activated, and ideally, the only configuration change required is the physical transmission media. Re-installation of services and system build, as well as the need to conduct a pre-deployment CIS exercise, must be avoided.

In addition to the central NMC, the forward deployed SSG will now also be part of the Service Management and Control.

The SSG is responsible for C4I Situational Awareness and the focal point for operational CIS events. In addition to CIS service and network management and awareness aspects, the SSG includes an Information Security OPR, responsible for all IA aspects in theatre, incl. crypto key management and incident management (in close operation with NIATC).

To support the need for autonomous mode, the SSG shall also have means to take over theatre SMC responsibilities in case that the NMC is not available.

6. CHAPTER SIX – SERVICE REQUIREMENTS

This chapter introduces the C2 Services requirements for each deployable C2 entity that has been introduced in Chapter 2 (Figure 2-1). To keep Chapter 6 generic, only the C2 services as per C3 classification taxonomy are introduced for each entity, and using the Joint Task Force Headquarters (JTF HQ) as an example, the process to derive those requirements is described. Notional examples are given, while more details on mandatory Information products and their exchange are presented in Annex D.

The IERs have been derived from NRF STEADFAST COBALT, STEADFAST JUNCTURE/JAZZ and TRIDENT JUNCTURE exercise planning and conduct, and revised with inputs from various operational communities.

Figure 6-1 shows generic collaboration services, with the JTF HQ in the centre. However, those collaboration services are available between any two C2 entities depicted in the diagram.

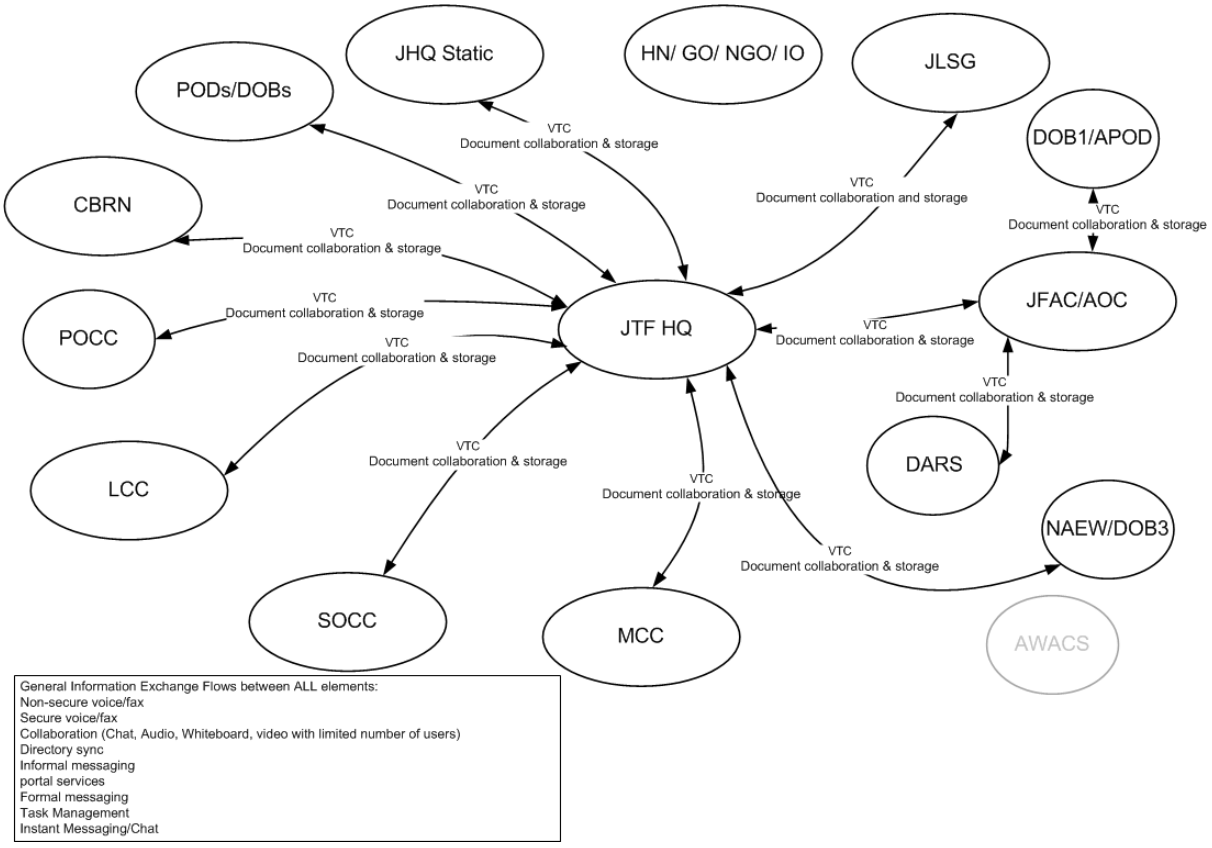


Figure 6-1: Generic Collaboration Service Requirement for a NATO Led Combined Joint Land Based Operation.

6.1 Joint Task Force Headquarters.

6.1.1 Specific C2 information product exchange for the JTF HQ is depicted in Figure 6-2. The bi-directional black arrow represents bi-directional exchange of information products, further detailed in Table 6-1-1. The unidirectional red arrow shows information products sent from the JTF HQ to other C2 entities, further detailed in Table 6-1-2. Finally, the green unidirectional arrows represent information products send to and consumed by the JTF HQ. These product exchanges are further detailed in Table 6-1-3.

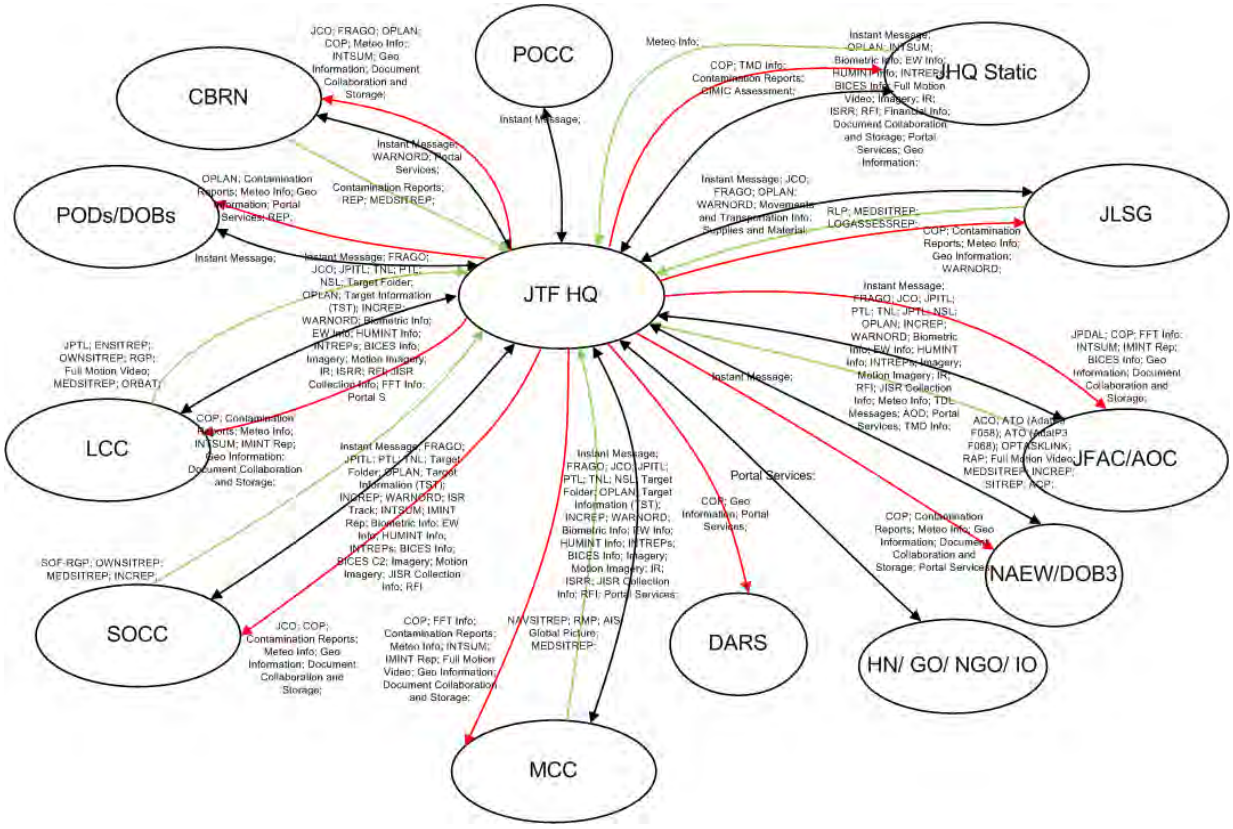


Figure 6-2: C2 Information Product Exchange JTF HQ

6.1.2 A notional example of the bi-directional Information Exchange Requirements between the JTF HQ and the other relevant C2 entities, introduced in Figure 6-1 and 6-2, are depicted in Table 6-1-1. The column “IERs To” lists the C2 entity the information products are exchanged with (in both directions), the second column lists the user service catering for the information exchange, the third column describes the activity, and finally the utmost right column identifies the Information product. The complete and applicable list of IER identified for the JTF HQ can be found in Annex D-II-1.

Table 6-1-1: JTF HQ Bi-Directional IERs (Notional Example)

IER TO	IE PRODUCT	USER SERVICE DEFINITION: OPERATIONAL CAPABILITY	TECHNICAL SERVICE LEVEL2	TECHNICAL SERVICE LEVEL 1
JFAC/AOC	PTL	JOINT TARGETING	JOINT COI SERVICE	COI SERVICES
DOB1/APOD	WARNORD	INTENT & GUIDANCE	LAND COI SERVICE	COI SERVICES
HN/ GO/ NGO/ IO	INFORMAL MESSAGE	INFORMAL MESSAGING	INFORMAL MESSAGING	CORE SERVICES
JHQ STATIC	DOCUMENT COLLABORATION AND STORAGE	INFORMATION MGT	INFORMATION MANAGEMENT SERVICES	CORE ENTERPRISE SERVICES
JLSG	OPLAN	PLANS	JOINT COI SERVICE	COI SERVICES
LCC	BIOMETRIC INFO	REPORTS	JISR COI SERVICE	COI SERVICES
MCC	PTL	JOINT TARGETING	JOINT COI SERVICE	COI SERVICES
NAEW/DOB3	VOICE (NON-SECURE)	VOICE	VOICE	CORE SERVICES
SOCC	MOTION IMAGERY	INTEL DATABASE SERVICES	JISR COI SERVICE	COI SERVICES

6.1.3 Notional examples of Information products disseminated from the JTF HQ to the other relevant C2 entities, as introduced in Figure 6-2, are depicted in Table 6-1-2. The complete and applicable list of IER identified for the JTF HQ can be found in Annex D-II-1.

Table 6-1-2: JTF HQ Uni-Directional Information Products Disseminated (Notional Example)

IER TO	IE PRODUCT	USER SERVICE DEFINITION: OPERATIONAL CAPABILITY	TECHNICAL SERVICE LEVEL2	TECHNICAL SERVICE LEVEL 1
JFAC/AOC	COP	SITUATIONAL AWARENESS	JOINT COI SERVICE	COI SERVICES
JHQ STATIC	CONTAMINATION REPORTS	NBC	ENVIRONMENTAL COI SERVICE	COI SERVICES
JLSG	CIS PICTURE	SITUATIONAL AWARENESS	JOINT NOC SERVICES	SMC
MCC	FFT INFO	FFT	SITUATIONAL AWARENESS SERVICE	COI SERVICES
NAEW/DOB3	METEO INFO	METEO	ENVIRONMENTAL COI SERVICE	COI SERVICES
SOCC	JCO	TASKING & ORDERS	JOINT COI SERVICE	COI SERVICES

6.1.4 Finally, Table 6-1-3 contains a notional representation of unidirectional information products consumed by the JTF HQ, as introduced in Figure 6-2. The complete and applicable list of IER identified for the JTF HQ can be found in Annex D-II-1.

Table 6-1-3: JTF HQ Uni-Directional Information Products Consumed (Notional Example)

IER FROM	IE PRODUCT	USER SERVICE DEFINITION: OPERATIONAL CAPABILITY	TECHNICAL SERVICE LEVEL2	TECHNICAL SERVICE LEVEL 1
JFAC/AOC	RAP	SITUATIONAL AWARENESS	AIR COI SERVICE	COI SERVICES
CBRN	CONTAMINATION REPORTS	NBC	ENVIRONMENTAL COI SERVICE	COI SERVICES
JLSG	RLP	SITUATIONAL AWARENESS	LOGISTICS COI SERVICE	COI SERVICES
LCC	ORBAT	INTENT & GUIDANCE	LAND COI SERVICE	COI SERVICES
MCC	NAVSITREP	REPORTS	MARITIME COI SERVICE	COI SERVICES
SOCC	CIS SITREP	REPORTS	JOINT NOC SERVICES	SMC

6.1.5 Figure 6-3 summarises the C2 service requirements for a JTF HQ, using a representation format as introduced by the C3 classification taxonomy.

6.1.6 The set of services presented in Figure 6-3 was selected to ensure that a JFT HQ has all those C2 services available that are required to provide the initial operational capability for any mission template and mission type[28]. Depending on the specific mission that is planned and conducted, not all C2 services depicted in Figure 6-3 might be required. On the other hand, emerging mission needs might require additional C2 services to be made available after the initial deployment phase.

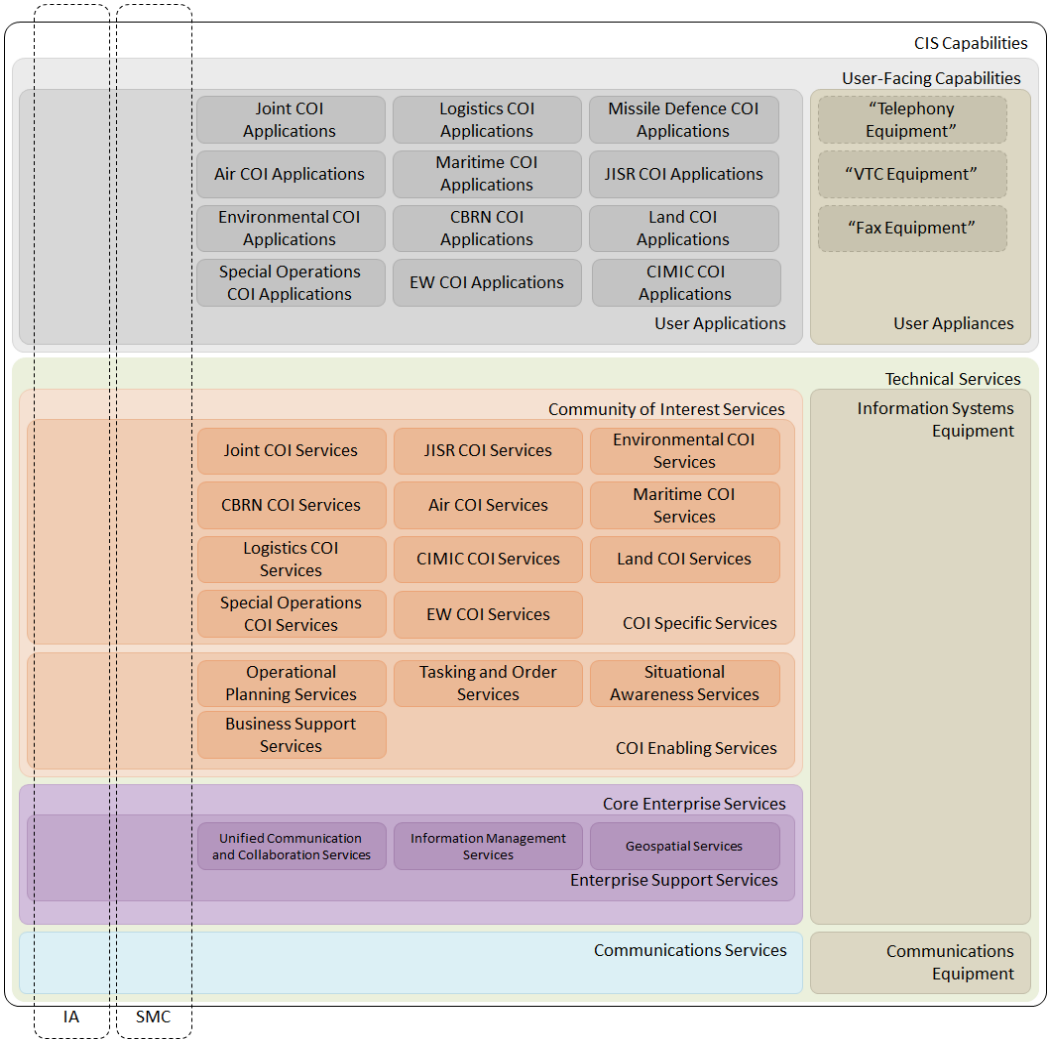


Figure 6-3: Generic C2 Service Requirement for a C2 Entity of Type JTF HQ

[28] For a NRF JTF HQ, all services shown in Figure 6-3 shall be available, installed, tested and maintained in the DCIS PoP that is earmarked to be the node that supports the JTF HQ upon deployment. That way, the NRF commander has a well-defined baseline of tools and services available for mission conduct, and during deployment preparation, no cumbersome and error prone ad-hoc service installations are required to obtain operational readiness. This also helps the DCMs to achieve the very short notice to move required for NRF DCIS.

6.2 Land Component Command.

6.2.1 The C2 services that are identified as required for a generic LCC entity are depicted in Figure 6-4. They have been derived using the same approach as introduced for the JTF HQ in Chapter 6-1. The services in Figure 6-4 were selected to ensure that a LCC has all those C2 services available that are required to provide the initial operational capability for any mission template and mission type[29]. Depending on the specific mission that is planned and conducted, not all C2 services depicted in Figure 6-4 might be required. On the other hand, emerging mission needs might require additional C2 services to be made available after the initial deployment phase.

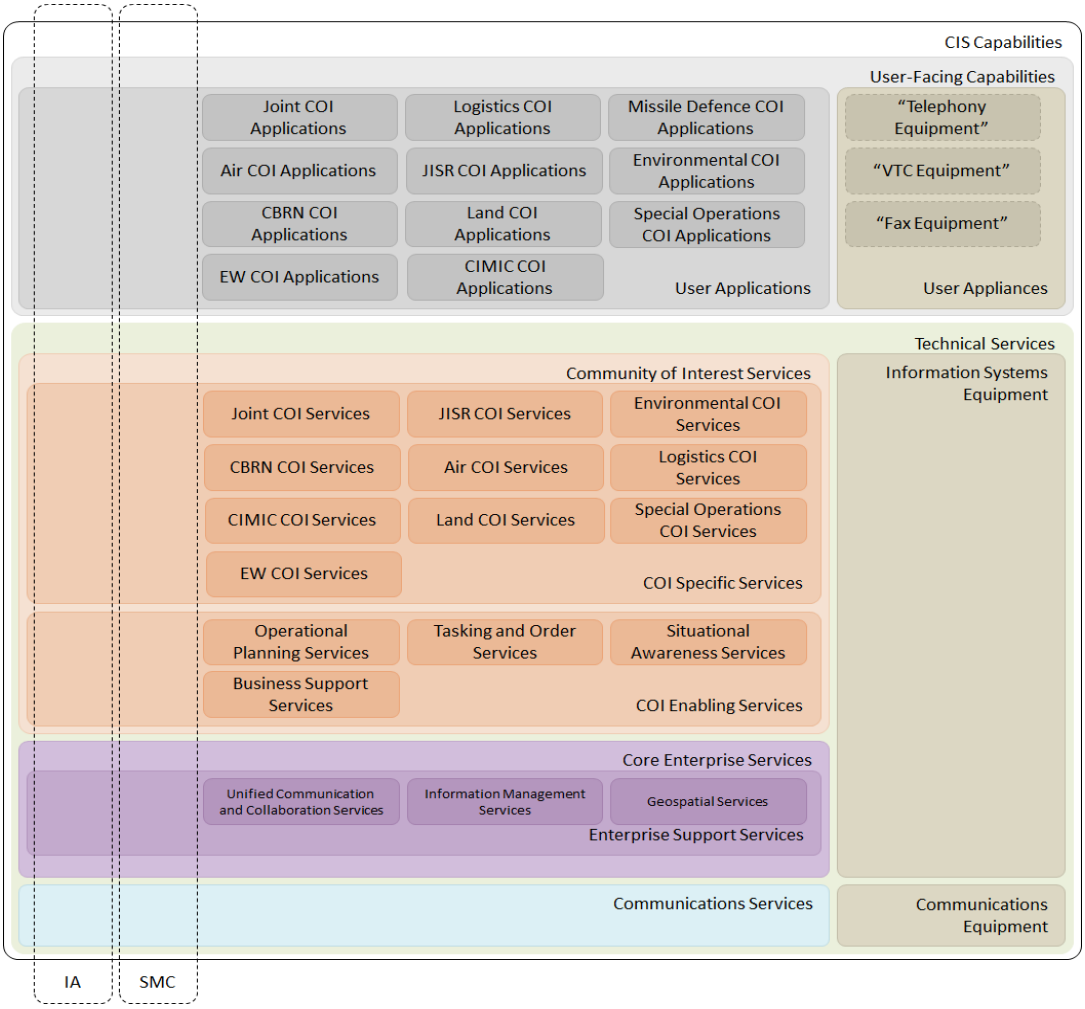


Figure 6-4: Generic C2 Service Requirement for a C2 Entity of Type LCC

6.2.2 The complete and applicable list of IER identified for the LCC can be found in Annex D-II-2.

[29] For a NRF LCC all services shown in Figure 6-4 shall be available, installed, tested and maintained in the DCIS PoP that is earmarked to be the node that supports the LCC upon deployment. Additional rationale see footnote 28 in para 6.1.

6.3 Maritime Component Command.

6.3.1 Minimum Interoperability Fitting Standards for Communications and Information Systems (CIS) Equipment on-board Maritime are provided with MC 0195 (Reference O)[30]. In this section, the C2 services that are identified as required for a generic MCC entity are depicted in Figure 6-5. They have been derived using the same approach as introduced for the JTF HQ in chapter 6-1. The services in Figure 6-5 were selected to ensure that a MCC has all those C2 services available that are required to provide the initial operational capability for any mission template and mission type[31]. Depending on the specific mission that is planned and conducted, not all C2 services depicted in Figure 6-5 might be required. On the other hand, emerging mission needs might require additional C2 services to be made available after the initial deployment phase.

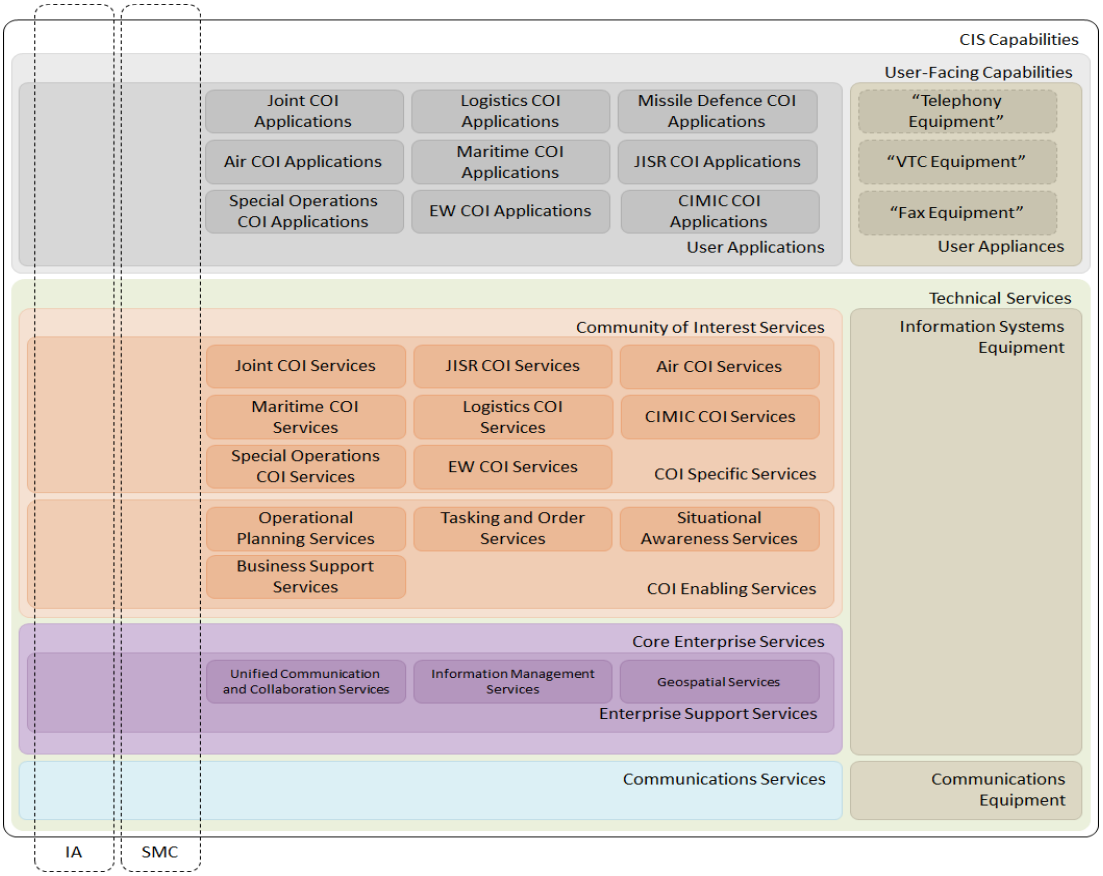


Figure 6-5: Generic C2 Service Requirement for a C2 Entity of Type MCC

6.3.2 The complete and applicable list of IER identified for the MCC can be found in Annex D-II-3.

[30] MC 0195 does not explicitly mention a MCC afloat. It can be assumed that an MCC afloat is an Afloat Command platform small (Page 68) or medium (Page 66) in MC 0195 terms. Basic IERs mentioned in MC 0195 seem to be aligned with MC 0593. However, with MC 0593 being the higher document, future MC195 versions should align to MC 0593.

[31] For a NRF MCC all services shown in Figure 6-5 shall be available, installed, tested and maintained in the DCIS PoP that is earmarked to be the node that supports the MCC upon deployment. Additional rationale see footnote 28 in para 6.1.

6.4 Joint Forces Air Component (JFAC).

6.4.1 The tasks of the Air Component Command (ACC) in operations will be accomplished through a JFAC (NCS and/or NFS). The C2 services that are identified as required for a JFAC are depicted in Figure 6-6. The C2 services have been derived using the same approach as introduced for the JTF HQ in Chapter 6-1. The services in Figure 6-6 were selected to ensure that a JFAC has all those C2 services available that are required to provide the initial operational capability for any mission template and mission type[32]. Depending on the specific mission that is planned and conducted, not all C2 services depicted in Figure 6-6 might be required. On the other hand, emerging mission needs might require additional C2 services to be made available after the initial deployment phase.

6.4.2 The complete and applicable list of IERs identified for the JFAC deployable elements of the JFAC and the DARS can be found in Annexes D-II-4-1 and D-II-4-15. For the purpose of the IER diagrams, the locations (static or deployed) of the JFAC/AOC and DARS are not specified. In this way, both the static employment of the JFAC (preferred by AC Ramstein) and the forward deployment of JFAC (drawn from the NFS) is represented.

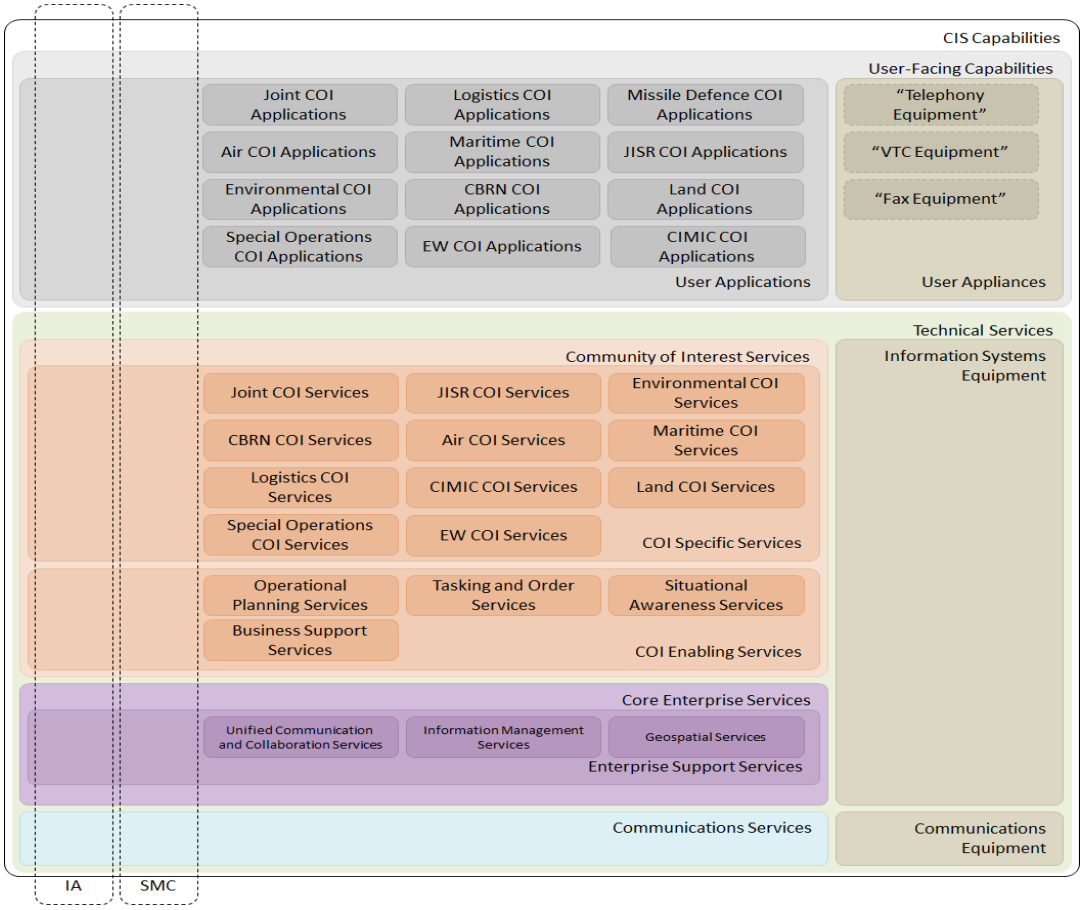


Figure 6-6: Generic C2 Service Requirement for a C2 Entity of Type JFAC/AOC

[32] For a NRF deployable elements of the JFAC all or sub-sections of the services shown in Figure 6-6 shall be available, installed, tested and maintained in the DCIS PoP that is earmarked to support the deployable elements of the JFAC. Additional rationale see footnote 28 in para 6.1.

6.5 Special Operations Component Command.

6.5.1 The C2 services that are identified as required for a generic SOCC entity are depicted in Figure 6-7. They have been derived using the same approach as introduced for the JTF HQ in chapter 6-1. The services in Figure 6-7 were selected to ensure that a SOCC has all those C2 services available that are required to provide the initial operational capability for any mission template and mission type[33]. Depending on the specific mission that is planned and conducted, not all C2 services depicted in Figure 6-7 might be required. On the other hand, emerging mission needs might require additional C2 services to be made available after the initial deployment phase.

6.5.2 The complete and applicable list of IER identified for the SOCC can be found in Annex D-II-5.

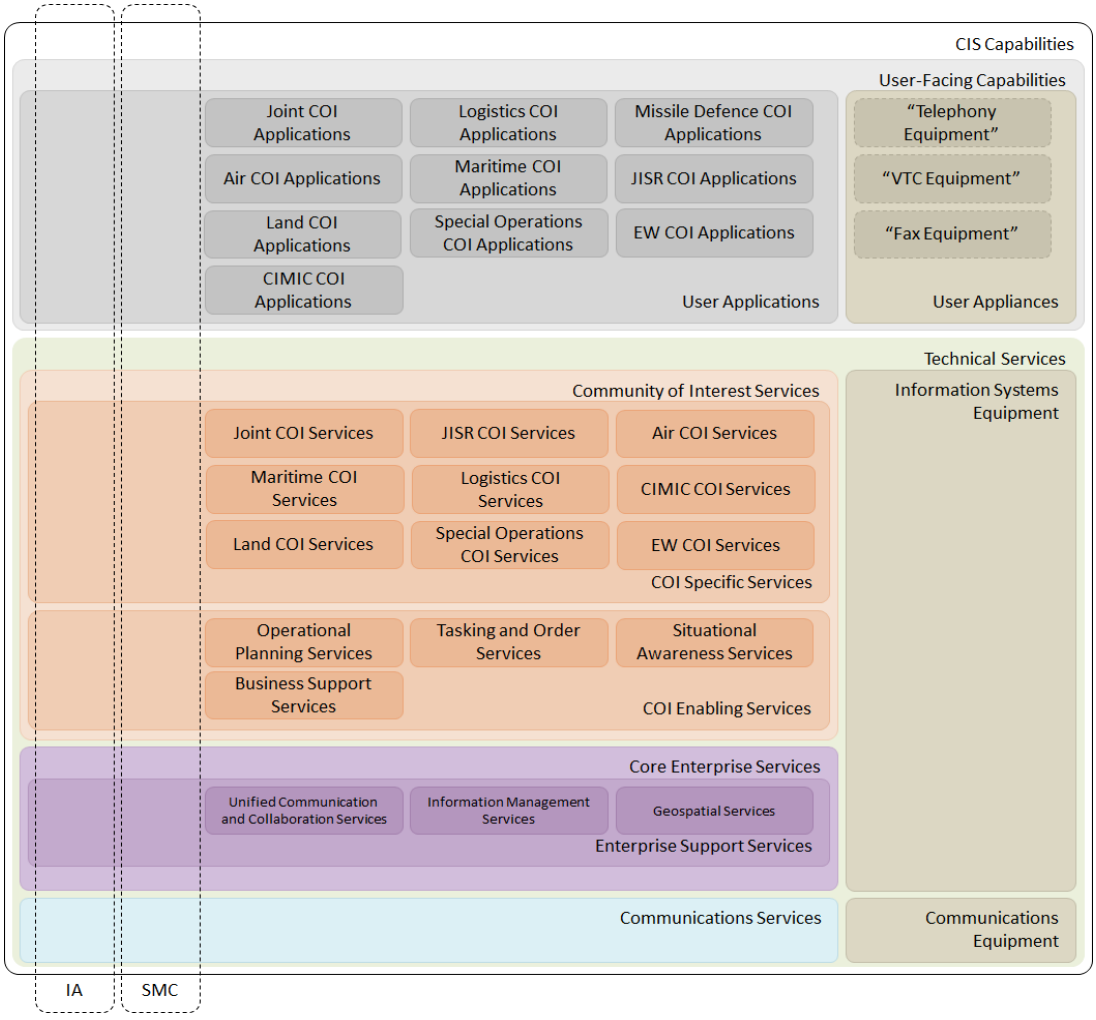


Figure 6-7: Generic C2 Service Requirement for a C2 Entity of Type SOCC

[33] For a NRF SOCC all services shown in Figure 6-7 shall be available, installed, tested and maintained in the DCIS PoP that is earmarked to be the node that supports the SOCC upon deployment. Additional rationale see footnote 28 in para 6.1.

6.6 Joint Logistics Support Group.

6.6.1 The C2 services that are identified as required for a generic Joint Logistics Support Group (JLSG) entity are depicted in Figure 6-8. They have been derived using the same approach as introduced for the JTF HQ in Chapter 6-1. The services in Figure 6-8 were selected to ensure that a JLSG has all those C2 services available that are required to provide the initial operational capability for any mission template and mission type[34]. Depending on the specific mission that is planned and conducted, not all C2 services depicted in Figure 6-8 might be required. On the other hand, emerging mission needs might require additional C2 services to be made available after the initial deployment phase.

6.6.2 The complete and applicable list of IER identified for the JLSG can be found in Annex D-II-6.

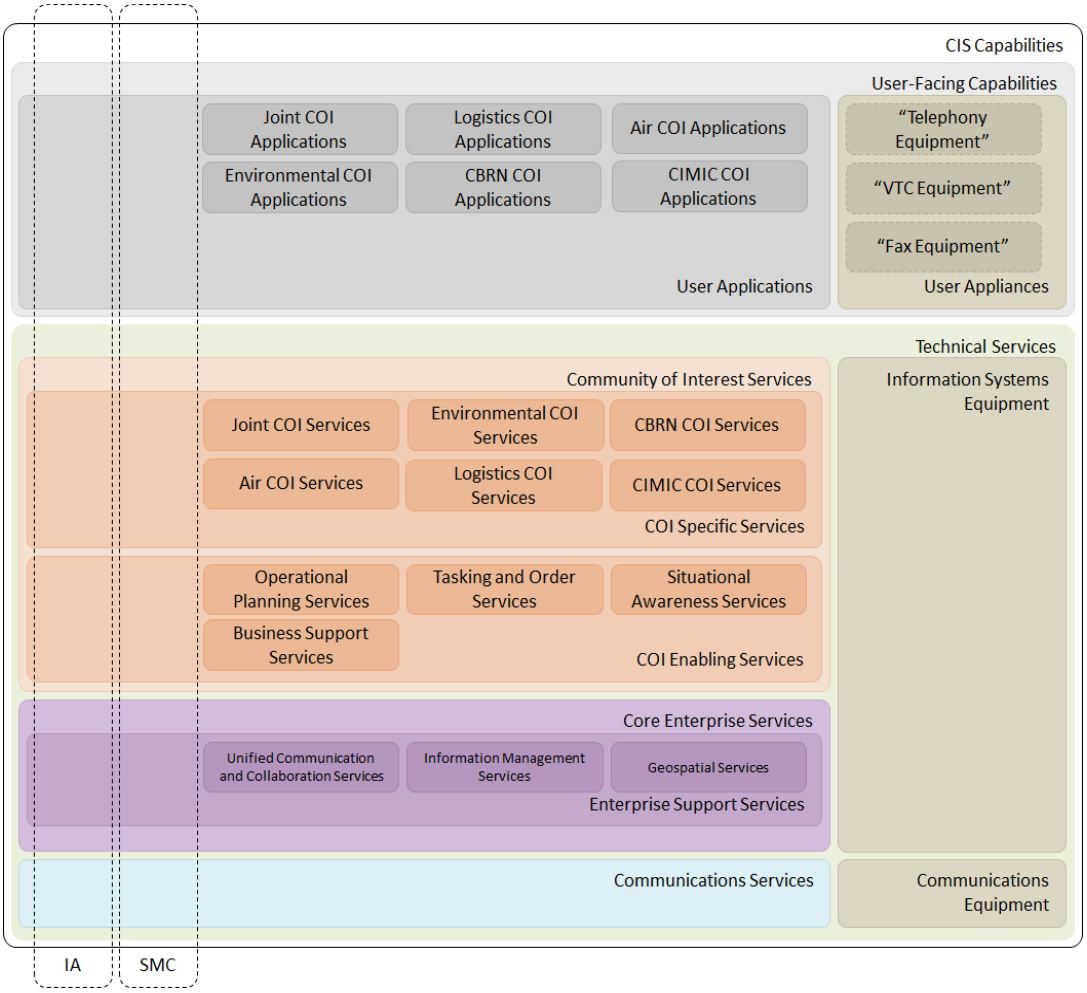


Figure 6-8: Generic C2 Service Requirement for a C2 Entity of Type JLSG

[34] For a NRF JLSG all services shown in Figure 6-8 shall be available, installed, tested and maintained in the DCIS PoP that is earmarked to be the node that supports the JLSG upon deployment. Additional rationale see footnote 28 in para 6.1.

6.7 Operational Liaison and Reconnaissance Team.

6.7.1 The C2 services that are identified as required for a generic Operational Liaison and Reconnaissance Team (OLRT) (Reference P) entity are depicted in Figure 6-9. They have been derived using the same approach as introduced for the JTF HQ in Chapter 6-1. The services in Figure 6-9 were selected to ensure that an OLRT has all those C2 services available that are required to provide the initial operational capability for any mission template and mission type[35]. Depending on the specific mission that is planned and conducted, not all C2 services depicted in Figure 6-9 might be required. On the other hand, emerging mission needs might require additional C2 services to be made available after the initial deployment phase.

6.7.2 The complete and applicable list of IER identified for the OLRT can be found in Annex D-II-7.

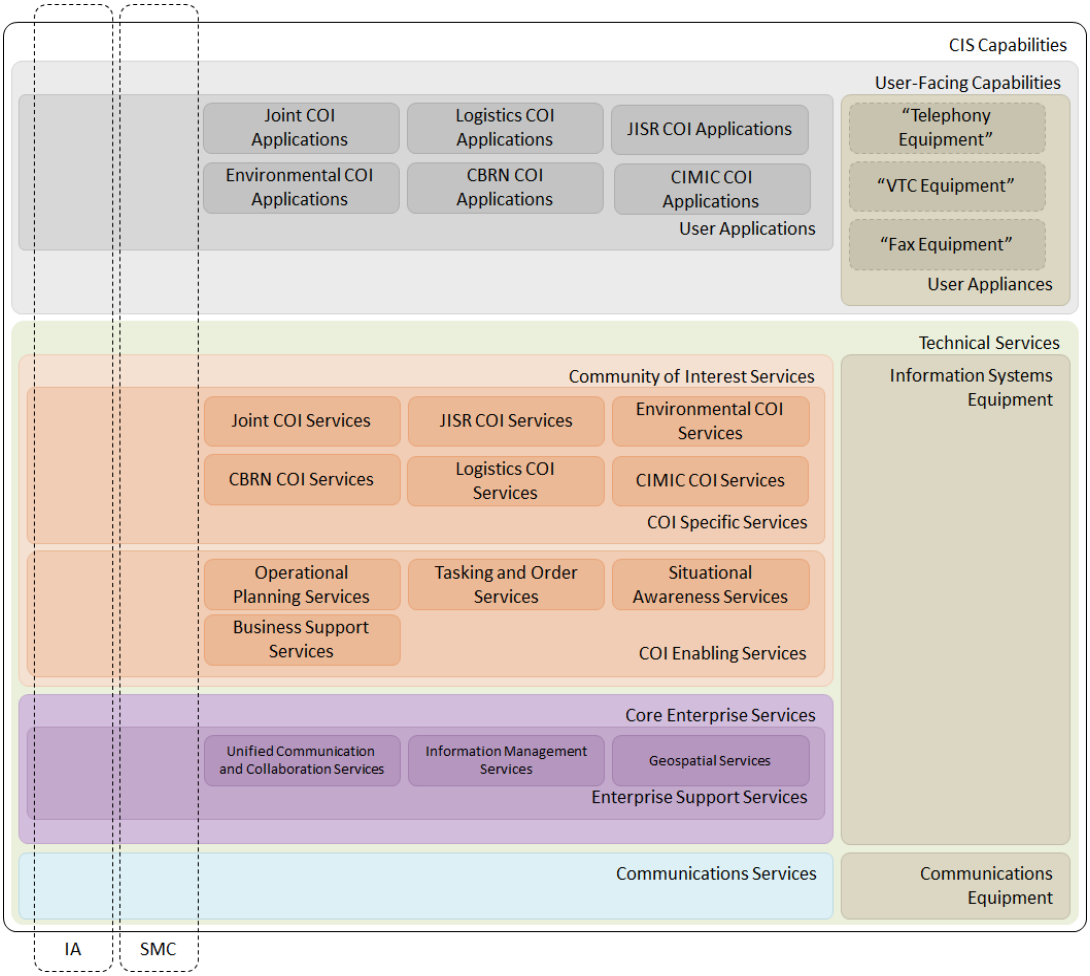


Figure 6-9: Generic C2 Service Requirement for a C2 Entity of Type OLRT

[35] For a NRF OLRT all services shown in Figure 6-9 shall be available, installed, tested and maintained on the OLRT KIT at the JFC premises. The OLRT is on two day notice to move, and shall operate without CIS specialist support. Additional rationale see footnote 28 in para 6.1.

6.8 Port of Debarkation and Deployed Operating Base.

Figure 6-10 provides an initial assessment of C2 service requirements for a Port of Debarkation (POD) and a Deployed Air Logistic Operating Base (DOB) entity. A more detailed analysis is subject to further study.

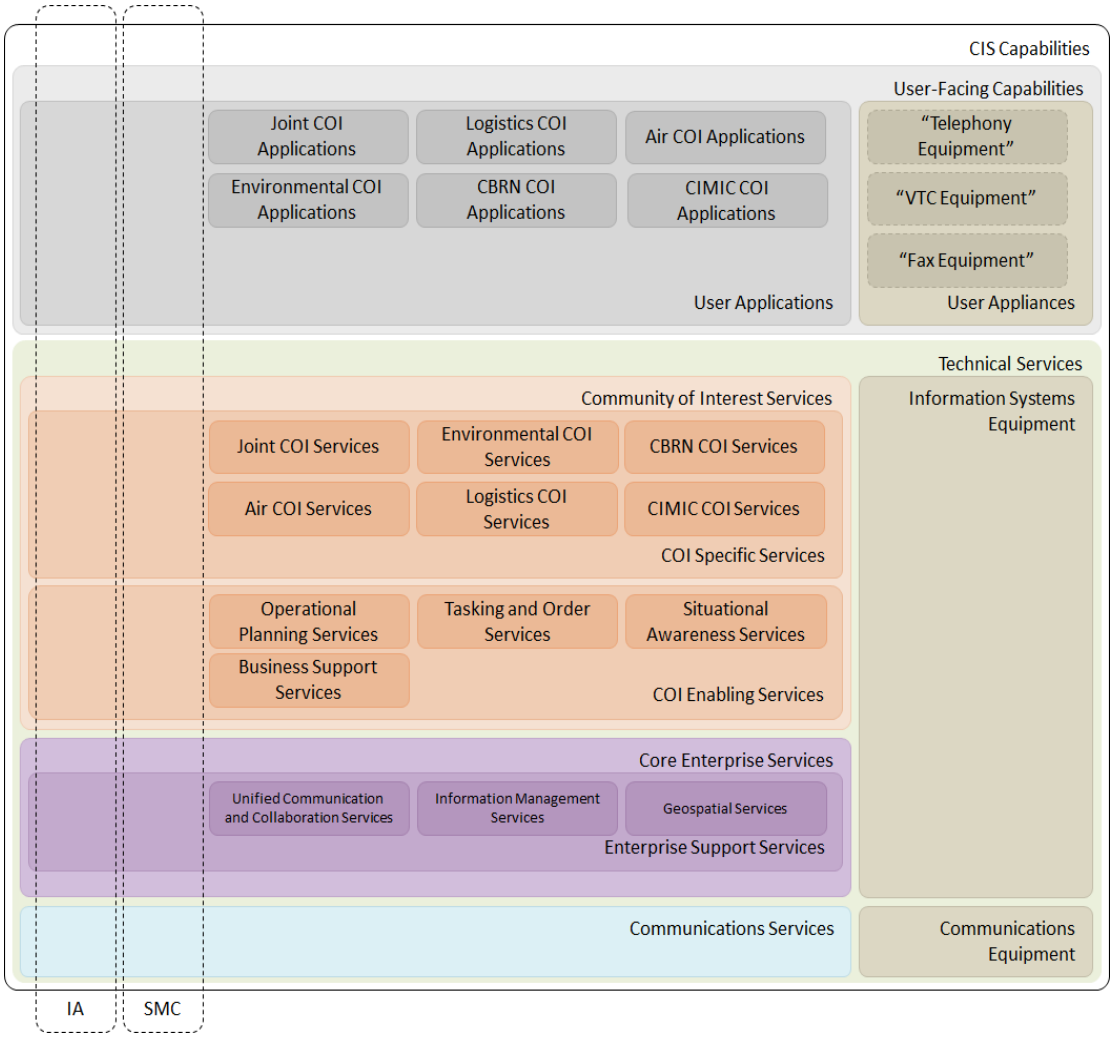


Figure 6-10: Generic C2 Service Requirement for a C2 Entity of Type POD and DOB

6.9 Theatre Liaison Team.

Figure 6-11 provides an initial assessment of C2 service requirements for a generic Theatre Liaison Team (TLT) entity. A more detailed analysis is subject to further study.

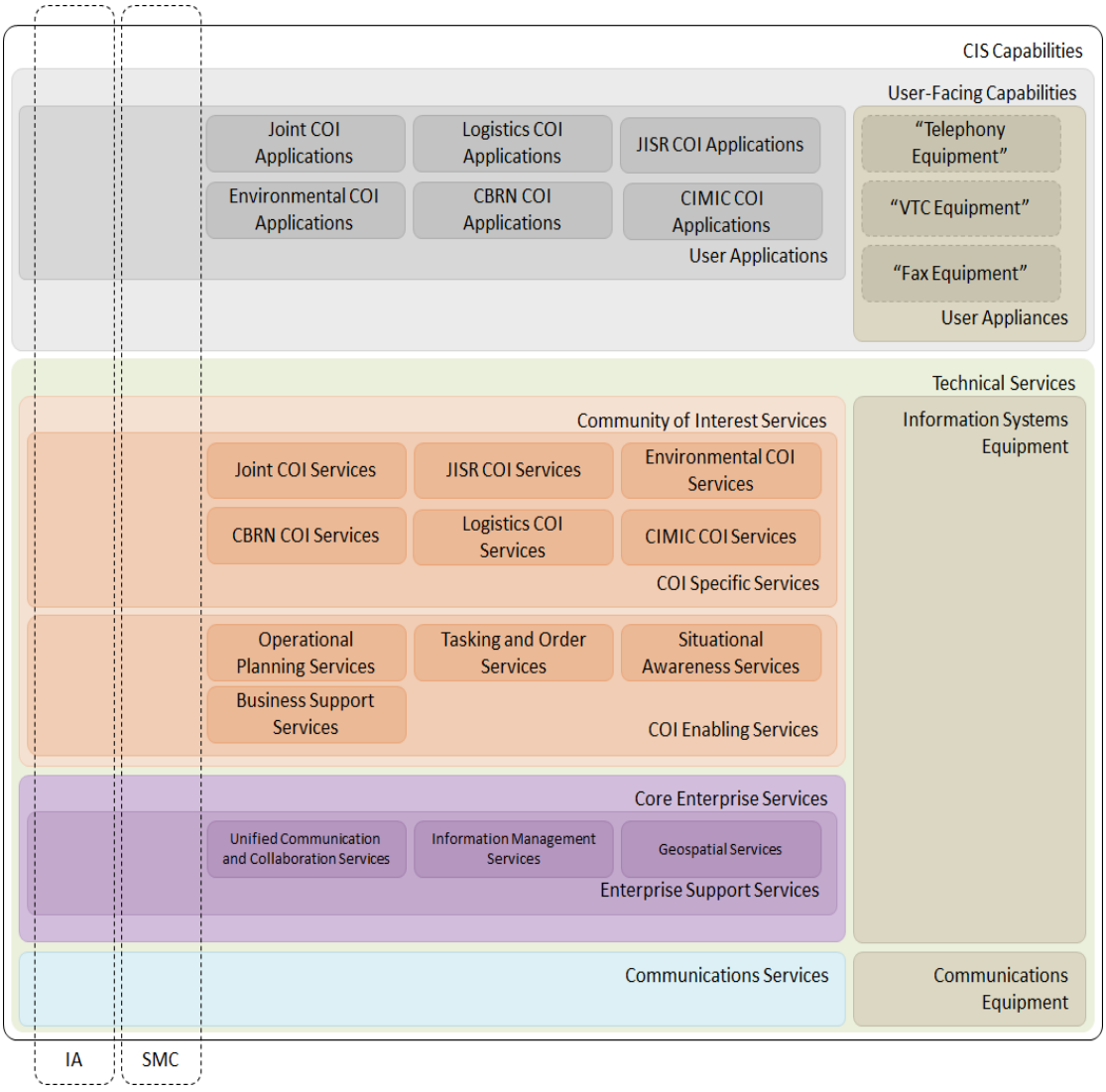


Figure 6-11: Generic C2 Service Requirement for a C2 Entity of Type TLT

6.10 Psychological Operations Component Command.

Figure 6-12 provides an initial assessment of C2 service requirements for a Psychological Operations Component Command (POCC) entity. A more detailed analysis is subject to further study.

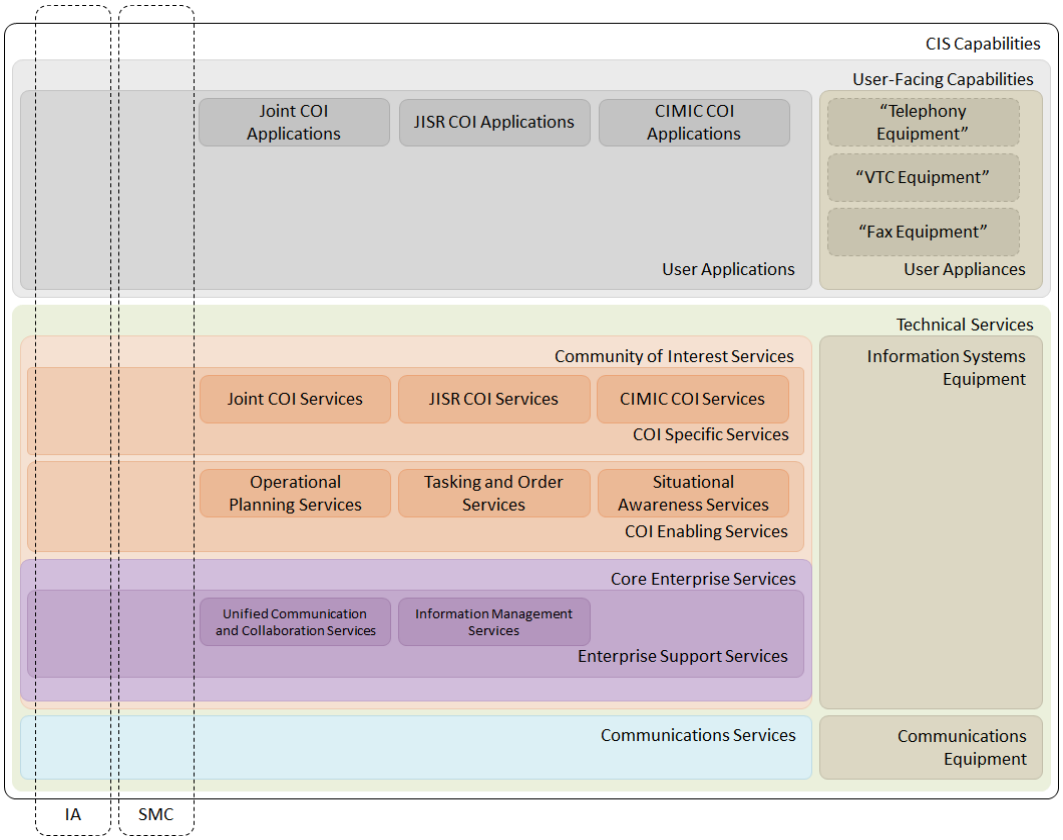


Figure 6-12: Generic C2 Service Requirement for a C2 Entity of Type POCC

6.11 Chemical Biological Radiological and Nuclear (CBRN).

Figure 6-13 provides an initial assessment of C2 service requirements for a Chemical Biological Radiological and Nuclear battalion Command entity. A more detailed analysis is subject to further study.

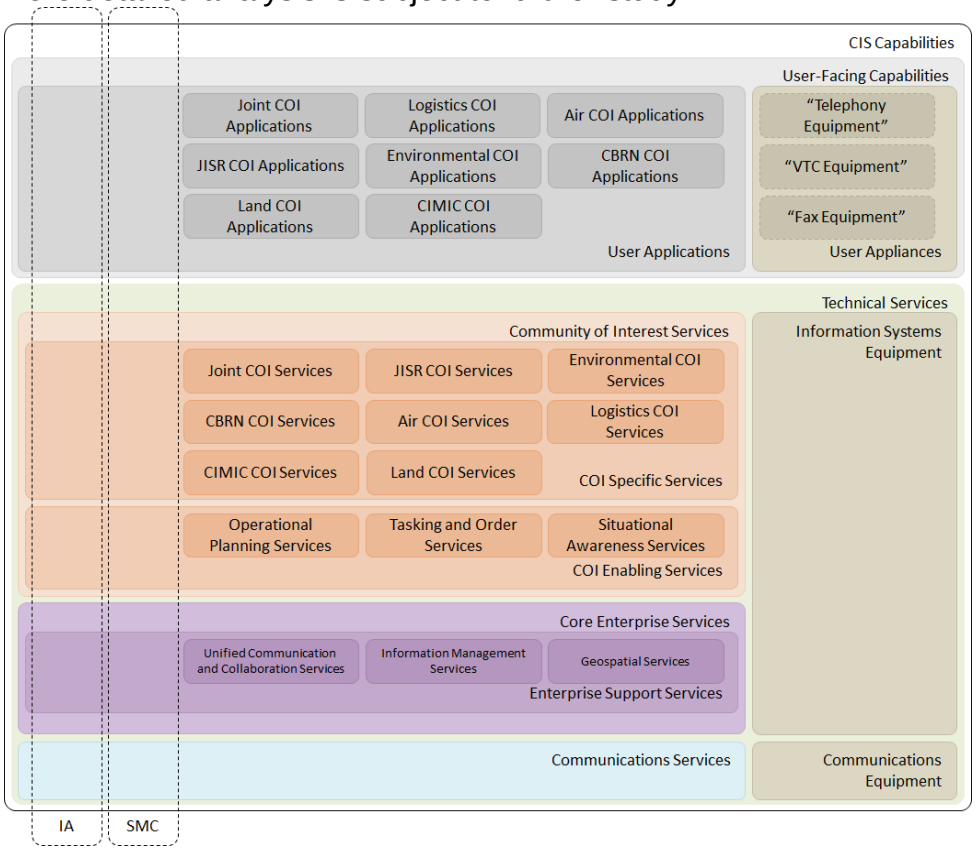


Figure 6-13: Generic C2 Service Requirement for a C2 Entity of Type CBRN

6.12 Theatre Reserve.

C2 service requirements for a generic Theatre Reverse C2 entity are subject to further study.

6.13 Forward Logistics Support Base (FLSB).

C2 service requirements for a generic Forward Logistics Support Base entity are subject to further study.

6.14 NATO Airborne Early Warning (NAEW).

C2 service requirements for a generic NATO Airborne Early Warning entity are subject to further study.

6.15 Deployable Air C2 Entities.

6.15.1 The C2 services that are identified as required for a generic DARS entity are depicted in Figure 6-14. They have been derived using the same approach as introduced for the JTF HQ in chapter 6-1. The services in Figure 6-14 were selected to ensure that a DARS has all those C2 services available that are required to provide the initial operational capability for any mission template and mission type[36]. Depending on the specific mission that is planned and conducted, not all C2 services depicted in Figure 6-14 might be required. On the other hand, emerging mission needs might require additional C2 services to be made available after the initial deployment phase.

6.15.2 The complete and applicable list of IER identified for the DARS can be found in Annex D-II-15.

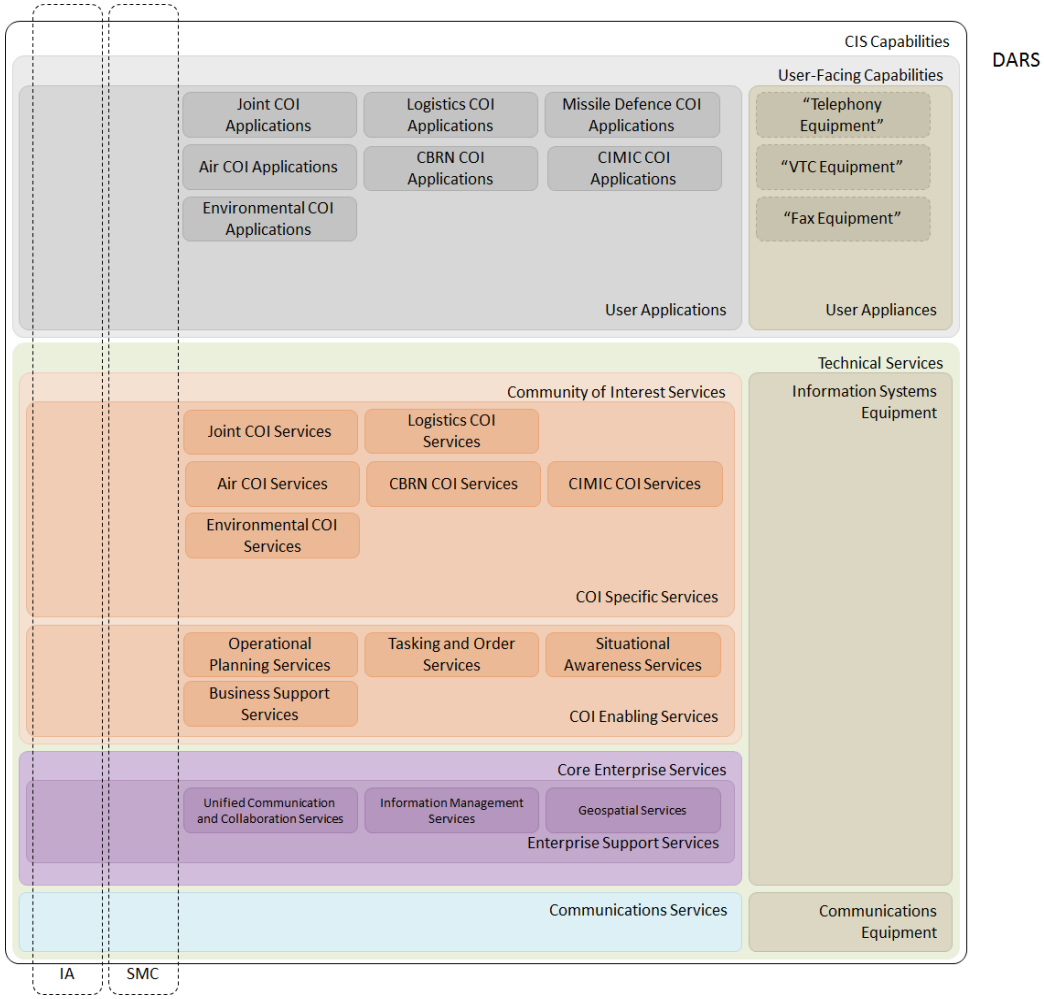


Figure 6-14: Generic C2 Service Requirement for a C2 Entity of Type DARS

[36] For a NRF DARS all services shown in Figure 6-14 shall be available, installed, tested and maintained in the DCIS PoP that is earmarked to be the node that supports the DARS upon deployment. Additional rationale see footnote 28 in para 6.1.

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ANNEX A TO
MC 0593

ABBREVIATIONS

A	
ACC	: Air Component Command (NATO led operation)
ACO	: Allied Command Operations
ACP	: Afloat Command Platform
ACT	: Allied Command Transformation
AGS	: Alliance Ground Surveillance
AIRCOM	: Air Command (Ramstein)
AOD	: Air Operations Directive
AOO	: Area of Operations
ASNMC	: Advanced SATCOM Network Management Capability
ATF	: Amphibious Task Force
ATO	: Air Tasking Order
B	
BCR	: Black Core Router
BDA	: Battle Damage Assessment
Bi-SC	: Bi-Strategic Command
Bn	: Battalion
BOD	: Bandwidth on Demand
BST	: Battle Staff Training
C	
C2	: Command and Control
C2IS	: Command and Control IS
C3	: Consultation, Command and Control
C3B	: Consultation, Command and Control Board
CA	: Comprehensive Approach
CAOC	: Combined Air Operations Centre
CBRN	: Chemical Biological Radiological and Nuclear
CC HQ	: Component Command Headquarters
CCIR	: Commanders Critical Information Requirements
CES	: Core Enterprise Services
CFAO	: Conceptual Framework of Alliance Operations
CIS	: Communications and Information Systems
COI	: Community of Interest

COMPUSEC : Computer Security

COMSEC : Communications Security

CONOPS : Concept of Operations

CP : Capability Package

CRC : Control and Reporting Centre

CSS : Combat Service Support

CWIX : Coalition Warrior Interoperability eXploration, eXperimentation, eXamination, eXercise

D

DACCC : Deployable Air Command and Control Centre

D-AOC : Deployable Air Operations Centre

DARS : Deployable Air Control Centre (ACC) / Recognized Air Picture Production Centre(RPC) / Sensor Fusion Post (SFP)

DCIS : Deployable Communications and Information Systems

DCM : Deployable CIS Module

DJHQ : Deployed Joint Headquarters

DOB : Deployed Operating Base

DP : Defence Planning

DPoP : DCIS Point of Presence

DRR : Defence Requirements Review

E

EEFI : Essential Elements of Friendly Information

EMCON : Emission Control

EO : Expeditionary Operations

F

FE : Forward Element

FFIR : Friendly Force Information Requirements

FLSB : Forward Logistic Support Base

FMN : Federated Mission Networking

FN : Framework Nation

FS : Functional Services

FSE : Forward Support Element

G

GEO : Geospatial

H	
HF	: High Frequency
HIDS	: Host Intrusion Detection System
HNS	: Host Nation Support
HQ	: Headquarters
I	
IA	: Information Assurance
IEG	: Information Exchange Gateway
IER	: Information Exchange Requirement
IETV	: Interoperability Experimentation Testing and Validation
IOP	: Interoperability Point
INDS	: Intra-nodal Distribution System
INM	: Interface with Nation Module
INTSUM	: Intelligence Summery
IP	: Internet Protocol
ISAF	: International Security Assistance Force
ISG	: (NATO) Internet Services Gateway
ISM	: Information Services Module
J	
JCCC	: Joint CIS Control Centre
JF	: Joint Force
JFAC	: Joint Force Air Component
JFC	: Joint Force Command
JTF HQ	: Joint Task Force Headquarters
JLSG	: Joint Logistic Support Group
JOA	: Joint Operations Area
L	
LC3RTT	: Land C3 Requirements Tiger Team
LAN	: Local Area Network
LCC	: Land Component Command (NATO led operation)
LOA	: Level of Ambition
LANDCOM	: Land Command (Izmir)
LOGCON	: Logistics Control
LOS	: Line of Sight

M

MARCOM : Maritime Command (Northwood)
MC : Military Committee
MCC : Maritime Component Command (NATO led operation)
MCPC : Multiple Channels per Carrier
MCR : Minimum Capability Requirements
MEDEVAC : Medical Evacuation
METOC : Meteorological and Oceanographic
MF-TDMA : Multiple Frequency Time Division Multiplexing
MG : Ministerial Guidance
µISM : micro Information Services Module
MS : Mission Secret
MJO : Major Joint Operation
µCOM : micro Communications Module
µISM : micro Information Services Module
MU : Mission Unclassified

N

NAC : North Atlantic Council
NAEW : NATO Airborne Early Warning (forward operating location)
NC3S : NATO Consultation Command & Control Staff
NCI : NATO Communications Infrastructure
NCIA : NATO Communications and Information Agency
NCS : NATO Command Structure
NDPP : NATO Defence Planning Process
NFS : NATO Force Structure
NGCS : NATO General Communications System
NIATC : NATO Information Assurance Technical Centre
NICE : NATO IP Cryptographic Equipment
NIDS : Network Intrusion Detection System
NISP : NATO Interoperability Standards and Profiles
NMC : Network Management Centre
NOC : Network Operating Capability
NR : NATO Restricted

NRF : NATO Response Force
NS : NATO Secret
NSB : NATO Signal Battalion
NSCC : NATO Special Operations Forces Coordination Centre
NSHQ : NATO Special Operations Forces Headquarters
NSE : National Support Element
NSL : No-Strike List
NU : NATO Unclassified

O

OLRT : Operational Liaison and Reconnaissance Team
O&M : Operating and Maintenance
OPCON : Operational Control
OPLAN : Operational Plan
OPORDER : Operational Order
OPR : Office of Primary Responsibility
ORBAT : Order of Battle
OUP : Operation Unified Protector

P

PCN : Protected Core Network
PG : Political Guidance
PIR : Priority Intelligence Requirements
PMESII : Political, Military, Economic, Social, Infrastructure and Information
POCC : Psychological Operations Component Command
POD : Port(s) of Debarkation
PoP : Point of Presence
PSTN : Public Switched Telephone Network
PTT : Post, Telephone, Telegraph (Commercial provided leased line service)

Q

QRP : Quick Reaction Package

R

RAP : Recognized Air Picture
RCP : Recognized Civil Picture
REP : Recognized Environmental Picture
RGP : Recognized Ground Picture

RIP : Recognized Intelligence Picture
RLP : Recognized Logistics Picture
RMP : Recognized Maritime Picture
RTL : Restricted Target List

S

SACEUR : Supreme Allied Commander Europe
SAR : Secure Access Router
SATCOM : Satellite Communications
SCPC : Single Channel per Carrier
SCR : SATCOM Convergence Router
SDP : Service Delivery Point
SGS : Satellite Ground Station (fixed/strategic)
SGT : Satellite Ground Terminal (fixed/strategic)
SIGINT : Signal Intelligence
SJO : Small Joint Operation
SLA : Service Level Agreement
SMS/NMS : Service/Network Management System
SMC : Service Management & Control
SOA : Service Oriented Approach
SOCC : Special Operations Component Command
SOF : Special Operation Forces
SOI : Standing Operating Instruction
SOP : Standing Operating Procedures
SSG : Signal Support Group
STANAG : NATO Standardization Agreement

T

TBMD : Theatre Ballistic Missile Defence
TCN : Troop Contributing Nation
TLT : Theatre Liaison Team
TN : Technical Note
TSGT : Transportable Satellite Ground Terminal
TTW : Territorial Waters

U

UAR : User Access Router

V	
VTC	: Video, Tele Conference
W	
WAN	: Wide-Area Network
WMD	: Weapons of Mass Destruction
WS	: Workstation

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ANNEX B TO
MC 0593

DEFINITIONS

This Annex provides, in an alphabetic order, the most important definitions related to this MC Document.

No	Title/Subject	Abbreviation	Definition	Reference
1	Audio-Based Conference		An audio-based conference service provides a two-way simultaneous audio transmission among two or more remote parties on the network, including call set-up and call co-ordination in a bi-directional manner.	
2	Command and Control Information System	C2IS, CCIS	An Information system which provides military authorities with support for command and control; purposes.	AAP-31(A) NATO Glossary of Communication and Information Systems Terms and Definitions (2005)
3	Common Operational Picture	COP	According to NATO Doctrine, a COP: a. Is a snapshot in time of friendly, neutral and adversary forces and of the battle space environment shared by more than one command. It facilitates collaborative planning and assists all echelons to achieve situational awareness. It is comprised of data from recognized pictures such as the Recognized Ground, Maritime, Air and Space Pictures compiled and managed by skilled and accredited Subject Matter Experts (SME). b. Is an *integrated view* of Recognized Pictures (RP) (e.g. Land, Maritime, Air, and Special Operations, etc.) on a single screen, completed with Joint Functional Enhancements (e.g. Intelligence, Logistics, Engineers, CBRN, Civil, Geospatial and METOC) and Command Enhancements (e.g. Strategic Guidance and Information). c. It describes the Joint Combined Operational Situation and shows all relevant and reliable information the	ACO Directive (AD) 80-80 of 29 May 09

No	Title/Subject	Abbreviation	Definition	Reference
			Commander and his/her Staff need. d. Is not a Command and Control (C2) system, but a Situational Awareness (SA) Tool. It is a capability or functionality providing Commanders at all levels with a common view of the Battle Space. e. Types. (1) The COP for an allocated AOI is called the Area of Interest COP, which monitors a relatively large geographical area with a low level of details. (2) Each single NATO Mission should have a special COP, namely a Mission Specific COP, which has a relatively small geographical area and a high level of detail.	
4	Deployable CIS Module	DCM	DCM: Deployable CIS Module: NATO Signal unit and their CIS equipment to operate a NATO depl. PoP	
5	Directory Service		The enterprise directory service is responsible for the management of the enterprise directory.	
6	Formal Messaging		The operational tasking service provides the functionality to communicate orders, taskings and warnings. The progress reporting service provides the functionality to report on developments in the battle space. The service can be initiated based on an event or driven by a set schedule (battle rhythm).	
7	Functional Area	FA	The area of responsibility within an organization where specific operational, administrative or technical functions are performed.	AAP-31(A) (2005)

No	Title/Subject	Abbreviation	Definition	Reference
			Examples: Personnel, intelligence, operations, plans, training and logistics which provide train and direct COP production capabilities and SME's.	
8	Functional Service	FS	A service the provides a capacity to a specific staff function where the information content is closely related to the service Examples: Maritime picture, Geospatial and METOC information, personnel management, intelligence analyses…	AAP-31(A) (2005)
9	Information Exchange Requirement	IER	Those categories of information that must be exchanged between operational facilities to provide commanders with essential information for decision-making	AJP-6(2011)
10	Informal Messaging		The informal Messaging service provides exchange of electronic, text-based unformatted messages between parties on the network, with a possibility to attach digital documents to messages.	
11	Instant Messaging		The instant messaging service provides exchange of electronic, text-based messages between parties on the network, where a single establishment of connections between parties, and immediate delivery of messages to destination parties, is principal.	
12	Information Portal		The portal service provides the functionality to enable the user to access multiple IT-resources on the network from a single point. The portal service encapsulates authentication to separate systems and services and provides session management. The portal services allow the user to personalise the presentation of the various IT-resources.	

No	Title/Subject	Abbreviation	Definition	Reference
13	Information Browsing		The Web browser service provides the functionality to present to the user textual and graphical information ….	
14	Information Requirement	IR	According to NATO Doctrine: In intelligence usage, information regarding an adversary or potentially hostile actors and other relevant aspects of the operational environment that needs to be collected and processed to meet the intelligence requirements of a commander. According to US Army Doctrine: IRs are all information elements the commander and staff require to successfully conduct operations; that is, all elements necessary to address the factors of METT-TC. (The joint definition of IRs includes only intelligence requirements; the Army definition encompasses all RI.) IRs must be related to the unit mission.	AAP 6, NATO Glossary of Terms and definitions of 2011 US Army Field Manual 6-0 of 11 Aug 03
15	Interoperability		Interoperability is the ability to operate in synergy in the execution of assigned tasks.	AAP 6, NATO Glossary of Terms and definitions of 2011
16	Interoperability Point	IOP	An interoperability point defines the technical requirements for interoperability at a physical interconnection point between two networks to support one or more C2 services across the interconnection point. The definition covers everything from low level physical aspects like connector type and transmission media via network protocols to session and application protocols and information standards. Where necessary, an IOP also comprising IA standards to be applied. An interconnection point must be understood as the physical instance of an IOP, and usually take the form of a socket/plug combination.	

No	Title/Subject	Abbreviation	Definition	Reference
17	Mission Secret	MS	A generic secret information security domain for a NATO lead operation (existing instances are e.g. ISAF or KFOR Secret). The Mission Secret domain is the domain where secret information can be shared with non NATO troop contributing nations.	AJP-6
18	Recognized Air Picture	RAP	A RAP is an electronically produced display compiled from radar and other sources covering a three-dimensional volume of an air space in which all detected air contacts has been evaluated and assigned an identification designation and a track number. The RAP can contain track data from the Ground and Maritime/Amphibious Battle Dimensions such as 'Aviation' helicopters and UAV's.	Bi-SC NATO COP CONOPS (2001)
19	Recognized Environmental Picture	REP	A REP is a complete and seamless depiction of geospatial, oceanographic and meteorological information designated for the planning and conduct of joint operations in a specific area at a specific time and which supports the unity of effort across the battle space. The REP is often used to provide the background information layers of the COP.	AAP 6, NATO Glossary of Terms and definitions of 2011
20	Recognized Ground Picture	RGP	An RGP is an electronically produced collection and display of data compiled from various sources, including Friendly Force Tracking Systems, ISR and Intelligence, covering a defined geographical AOI of the Ground Battle Dimension.	Bi-SC NATO COP CONOPS (2001)
21	Recognized Maritime Picture	RMP	A RMP is an integrated geographical presentation of the maritime picture, which is composed of all-source contact and planning data know at a given time, including surface, sub-surface and amphibious and maritime air units, forces and	Bi-SC NATO COP CONOPS (2001)

No	Title/Subject	Abbreviation	Definition	Reference
			operations in a designated area.	
22	Recognized Picture	RP	The RP is a display of the force disposition (e.g. friendly, hostile, neutral and unknown) including amplifying functional information (Intelligence, environmental, planning, routes, tracks, etc.) designed primarily to support a major warfare area.	Bi-SC NATO COP CONOPS (2001)
23	Tactical Data Link	TDL	Encrypted real-time bit-oriented formatted tactical data exchange over digital radio communication links using Common Message Standards. Examples include Link16, Link 22, OTH-Gold.	
24	Text-Based Conference		The text-based conference service provides the exchange of text-based messages via a CHAT protocol that enables multi-point text conversation in real time by allowing text entered at one site to be displayed within a session at other sites. Each site can enter text in the session. Exchange of text is maintained on a character-by-character or close to character-by-character basis in order to give the session participants an opportunity to exercise a natural conversation in text.	
25	Video-Based Conference		The video-based conference service provides a two-way simultaneous video transmission among two or more remote parties on the network, including call set-up, call co-ordination, full motion display of events and participants in a bi-directional manner, support for the management of directing the cameras, ranging from fixed position, to sender directed, to receiver directed, to automated sound pickup.	
26	White Board Based Conference		The whiteboard-based conference service allows to work on a unique set of information from different remote locations	

No	Title/Subject	Abbreviation	Definition	Reference
27	NATO DCIS connectivity		A C2 entity that is eligible for NATO DCIS connectivity will be provided with WAN access and INM capability in support of IOP 2a as defined in MC 0593.	
28	Eligible for NATO DCIS connectivity		``Eligible for NATO DCIS connectivity`` are the C2 elements depict in the mission templates for MJO1 to SJO 6. Note that the amount of PoPs is derived from the number of depl C2 entities eligible to NATO common funding, and that the DCM/NSB structure is designed to support those needs.	
29	"To"		A C2 entity that is authorized "To" provision will be provided with required NATO C2 services installed[40] on site. A "To" provision is limited to Local Area Network (LAN) infrastructure and user equipment in support of 10 active users, providing direct access to the NATO provided CES and COI services.. The overall CIS infrastructure of the C2 entity is the responsibility of the Framework Nation/multinational entity. C2 elements depicted in the CFAO templates and provided by the NATO Force Structure are eligible for to connectivity.	
30	Through		A C2 entity that is authorized "Through" provision will be provided with required NATO C2 services installed[37] on site. A "through" provision also included the necessary Local Area Network (LAN) infrastructure and user equipment across the whole C2 entity for the quantity of active users as identified in the latest minimum military requirement document. . C2 elements depicted in the CFAO templates and provided by the NATO Command Structure are eligible for through	

[37] For FS service provision, DCIS as per CP149 will only provide the hardware to support FS; FS software and licenses, FS installation and maintenance has to be provided by the FS CP.

No	Title/Subject	Abbreviation	Definition	Reference
			connectivity.	
31	Augmentation		A C2 entity that is authorized “Augmentation” provision will be provided with required NATO C2 services that are considered over and above the national obligations. (e.g. Afloat Command platform requirements that are in excess of equipment levels agreed in MC 0195).	
32	TLK-kit		The Theatre Liaison team kit is the CIS equipment supporting and Theatre Liaison Team as per MJO High (1) and MJO-low(2) mission template.	
33	OLRT-kit		The OLRT is a C2 entity, consisting of personal and equip-ment. The OLRT consists of up to 4 OLRT sub-teams.An OLRT sub team is an autonomous entity that can deploy, roam and operate in theatre, and therefore includes vehicle, CIS and real life support. The OLRT Sub Team Kit (OLRT STK) com-prises the CIS that is required to support the OLRT Sub Team.	
34	Autonomous mode		Mode where a DCIS C2 elements continue to provide C2 services autonomously (on their own), even when isolated from or other network nodes and /or reach back facilities/resources. Support of autonomous mode is a mandatory requirement for deployable NRF C2 entities.	

ANNEX C TO
MC 0593

CRITICAL C2 PROCESSES FOR JOINT OPERATIONS

1. Operational Characteristics.

a. Major Joint Operation (MJO). A MJO is Corps-size (Land), NATO Task Force (Maritime) and 1000 Sorties a day (Air: Combat and Support) operation.

b. Smaller Joint Operation (SJO). A SJO comprises up to a Division (Land), a NATO Task Group (Maritime) and 350 sorties a day (Air).

2. JTF HQ Critical Processes.

a. Command and Control (to include CIS)

b. Knowledge Development (to include Intelligence)

c. Planning (prior and during OPS)

d. Assessment

e. Joint Synchronization and Execution

f. Situational Awareness

g. Effects management

h. Targeting

i. Information Operations

j. Resource Coordination

k. Public Affairs.

3. Joint Task Force HQ Functional Areas.

The following main Functional Areas exist within a JFC (in alphabetic order):

a. Air

b. Chemical Biological Radiological and Nuclear (CBRN)

c. Civil/Military Cooperation (CIMIC)

d. Counter-Improvised Explosive Devices (C-IED)

e. Electronic Warfare (EW)

f. Force Protection (FP)

g. Geospatial, Meteorological and Oceanographic (GEOMETOC)

h. Communications and Information Systems Operations (CIS Ops)

i. Information Operations (Info Ops)

j. Land, maritime, Air Infrastructure

k. Intelligence, including Joint Intelligence Surveillance Reconnaissance (JISR),and Collection Coordination and Intelligence Requirements Management (CCIRM)

l. Land

m. Land Force and Infrastructure/Environmental Protection
n. Legal Advisor (LEGAD)
o. Maritime
p. Medical
q. Movement & Transport
r. Nuclear Operations (NUC Ops, mainly conducted in JFC HQ)
s. Political Advisor (POLAD)
t. Psychological Operations (PsyOps)
u. Social-Economical Analysis
v. Non-NATO Civilian Entities Analysis
w. Special Operations Forces (SOF)
x. Spectrum Management
y. Strategic Communications (STRATCOM)
z. Supply and Logistics
aa. Targeting

ANNEX D TO
MC 0593

IER DEFINITIONS AND SPECIFICATIONS

This Annex provides detailed operational information exchange requirements for NATO led Joint land based operations and, using the SJO-2 mission template, a detailed list of information products generated and consumed by all relevant C2 entities for that mission.

The IERs have been derived from NRF STEADFAST COBALT, STEADFAST JUNCTURE/JAZZ and TRIDENT JUNCTURE exercise planning and conduct, and revised with inputs from various operational communities.

In addition to the minimum operationally required information products exchange the “need-to-share” principle will be implemented using portal services. Each C2 entity will ensure access and proper metadata labelling of information products generated.

Note that these IERs are not exhaustive as they are only addressing the minimum requirements; other sources may contribute to the mission information space.

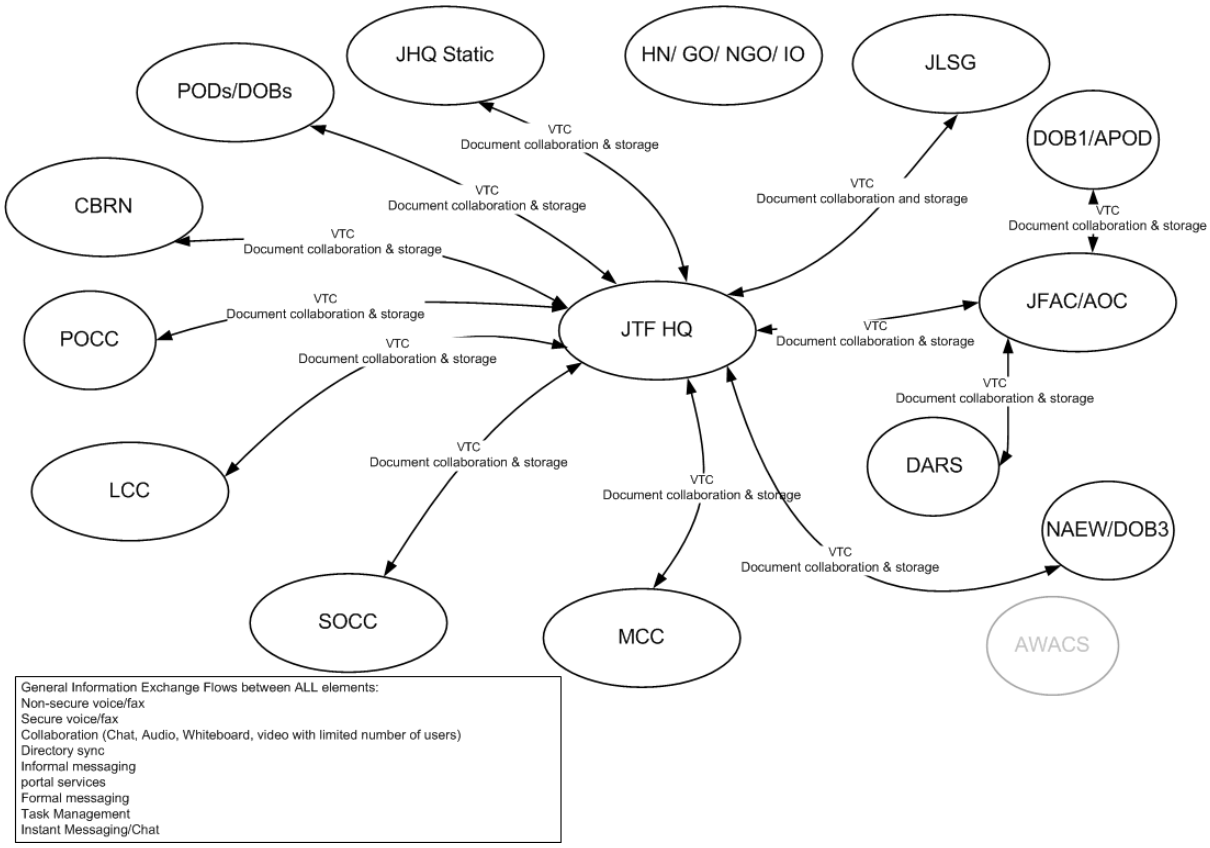

Figure D-1-1: Generic Collaboration Service Requirement for a NATO Led Combined Joint Land Based Operation.

Figure D-1-1 shows the generic collaboration services required in a NATO led operation. While Figure D-1-1 has the JTF HQ in its centre, the collaboration

services shall be available between any of the C2 entities on operational command level.

The C2/COI service specific IER information is presented in this Annex in different presentation formats, derived from the same database.

Annex D-I provides a list of information products produced and consumed by each C2 element depicted in Figure 2-1.

Finally, Annex D-II provides the IERs focusing on a single C2 entity in one diagram, and with one Table per IER flow (bi-directional, disseminated, consumed).

Note that Tactical Data Link (TDL) information, transferred over non-radio carriers, primarily uses Internet Protocol (IP) means.

D-I Generic Information Exchange Requirements Table.

Table D-I-1: Detailed List of Information Products Produced and Consumed by Each C2 Element Depicted in Figure 2-1

NRF INFORMATION PRODUCT	TECHNICAL SERVICE LEVEL 2	OPERATIONAL CAPABILITY	JHQ STATIC	JTF HQ	JLSG	JFAC/ AOC	DARS	DOB1	LCC	POCC	CBRN	MCC	SOCC	DOB3	NAEW	POD2	FLSB	POD1	DOB2	HN/ GO/ NGO/ IO
INSTANT MESSAGE	JOINT COI SERVICE	INSTANT MESSAGING	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
ORBAT	JOINT COI SERVICE	INTENT & GUIDANCE	x	x		x	x		x			x	x							
WARNORD	JOINT COI SERVICE	INTENT & GUIDANCE		x	x	x			x		x	x	x							
JPITL	JOINT COI SERVICE	JOINT TARGETING		x		x	x		x			x	x							
JPTL	JOINT COI SERVICE	JOINT TARGETING		x		x	x		x											
NSL	JOINT COI SERVICE	JOINT TARGETING		x		x			x			x	x							
PTL	JOINT COI SERVICE	JOINT TARGETING		x		x	x		x			x	x							
RTL	JOINT COI SERVICE	JOINT TARGETING																		
TARGET FOLDER	JOINT COI SERVICE	JOINT TARGETING		x		x			x			x	x							
TNL	JOINT COI SERVICE	JOINT TARGETING		x		x	x		x			x	x							
JPDAL	JOINT COI SERVICE	PLANS		x		x														
OPLAN	JOINT COI SERVICE	PLANS	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
INCREP	JOINT COI SERVICE	REPORTS	x	x		x			x			x	x							
BDA	JOINT COI SERVICE	SITUATIONAL AWARENESS	x	x		x			x			x	x							
COP	JOINT COI SERVICE	SITUATIONAL AWARENESS	x	x	x	x	x		x		x	x	x	x	x					
FRAGO	JOINT COI SERVICE	TASKING & ORDERS		x	x	x	x		x		x	x	x							
JCO	JOINT COI SERVICE	TASKING & ORDERS		x	x	x	x		x		x	x	x							
TARGET INFORMATION (TST)	JOINT COI SERVICE	TIME SENSITIVE TARGETING		x	x	x	x		x			x	x							
AOD	AIR COI SERVICE	INTENT & GUIDANCE		x		x	x	x	x			x	x	x	x					
ACP	AIR COI SERVICE	PLANS		x		x	x	x	x			x	x	x	x					
SITREP	AIR COI SERVICE	REPORTS		x		x														
ACMREQ	AIR COI SERVICE	REQUESTS AND RESPONSES				x			x			x	x							
AIRSUPREQ	AIR COI SERVICE	REQUESTS AND RESPONSES				x			x			x	x							
RESPONSE	AIR COI SERVICE	REQUESTS AND RESPONSES				x			x			x	x							
ASM OVERLAY	AIR COI SERVICE	SITUATIONAL AWARENESS				x	x													x
LINK16	AIR COI SERVICE	SITUATIONAL AWARENESS					x					x			x					
LINK22	AIR COI SERVICE	SITUATIONAL AWARENESS		x			x					x			x					
RAP	AIR COI SERVICE	SITUATIONAL AWARENESS		x	x	x	x	x	x			x	x	x	x	x		x	x	
TDL MESSAGES	AIR COI SERVICE	SITUATIONAL AWARENESS		x		x	x	x	x		x	x	x	x	x	x		x	x	
ACO	AIR COI SERVICE	TASKING & ORDERS		x		x	x	x	x			x	x	x	x					
ATO (ADATP3 F058)	AIR COI SERVICE	TASKING & ORDERS		x		x	x		x			x	x	x	x					
ATO (ADATP3 F068)	AIR COI SERVICE	TASKING & ORDERS		x		x	x		x			x	x	x	x					
OPTASKLINK	AIR COI SERVICE	TASKING & ORDERS		x		x	x	x	x			x	x	x	x	x		x	x	
TMD INFO	MISSILE DEFENCE COI SERVICE	TMD INFO		x	x	x	x	x	x		x	x	x	x	x		x	x	x	
FLIGHT PLANS	CIMIC COI SERVICE	SITUATIONAL AWARENESS				x														x
MILITARY FLIGHT SCHEDULE	CIMIC COI SERVICE	SITUATIONAL AWARENESS				x														x
ENSITREP	LAND COI SERVICE	REPORTS		x		x			x											
OWNSITREP	LAND COI SERVICE	REPORTS		x		x			x				x							
RGP	LAND COI SERVICE	SITUATIONAL AWARENESS		x					x		x									
SOF-RGP	SPECIAL OPERATIONS COI SERVICE	SITUATIONAL AWARENESS		x									x							
FFT INFO	SITUATIONAL AWARENESS SERVICE	FFT		x		x			x			x	x							
NAVSITREP	MARITIME COI SERVICE	REPORTS		x								x								

Table D-I-1: Detailed List of Information Products Produced and Consumed by Each C2 Element (cont.)

NRF INFORMATION PRODUCT	TECHNICAL SERVICE LEVEL 2	OPERATIONAL CAPABILITY	JHQ STATIC	JTF HQ	JLSG	JFAC/ AOC	DARS	DOB1	LCC	POCC	CBRN	MCC	SOCC	DOB3	NAEW	POD2	FLSB	POD1	DOB2	HN/ GO/ NGO/ IO
AIS GLOBAL PICTURE	MARITIME COI SERVICE	SITUATIONAL AWARENESS		x								x								
RMP	MARITIME COI SERVICE	SITUATIONAL AWARENESS		x								x								
MEDSITREP	LOGISTICS COI SERVICE	MEDICAL		x	x	x	x		x		x	x	x							
LOGASSESSREP	LOGISTICS COI SERVICE	REPORTS		x	x	x	x		x			x	x							
MOVEMENTS AND TRANSPORTATION INFO	LOGISTICS COI SERVICE	REPORTS	x	x	x	x	x	x	x		x	x	x	x	x	x		x	x	x
SUPPLIES AND MATERIAL	LOGISTICS COI SERVICE	RESOURCE STATUS		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
RLP	LOGISTICS COI SERVICE	SITUATIONAL AWARENESS		x	x	x	x	x	x		x	x	x	x	x	x	x	x	x	
BICES C2	JISR COI SERVICE	BICES C2		x									x							
BICES INFO	JISR COI SERVICE	BICES INFO	x	x		x			x			x	x							
FULL MOTION VIDEO	JISR COI SERVICE	FULL MOTION VIDEO	x	x		x			x			x	x							
IMAGERY	JISR COI SERVICE	INTEL DATABASE SERVICES	x	x		x			x			x	x		x					
MOTION IMAGERY	JISR COI SERVICE	INTEL DATABASE SERVICES	x	x		x			x			x	x							
BIOMETRIC INFO	JISR COI SERVICE	REPORTS	x	x		x			x			x	x							
EW INFO	JISR COI SERVICE	REPORTS		x		x			x			x	x							
HUMINT INFO	JISR COI SERVICE	REPORTS	x	x		x			x			x	x							
IMINT REP	JISR COI SERVICE	REPORTS		x		x			x			x	x							
INTREPS	JISR COI SERVICE	REPORTS	x	x		x	x		x			x	x							
INTSUM	JISR COI SERVICE	REPORTS		x		x	x		x		x	x	x							
IR	JISR COI SERVICE	REQUESTS AND RESPONSES	x	x		x	x		x		x	x	x							
ISRR	JISR COI SERVICE	REQUESTS AND RESPONSES	x	x		x			x			x	x							
JISR COLLECTION INFO	JISR COI SERVICE	REQUESTS AND RESPONSES	x	x		x			x			x	x							
RFI	JISR COI SERVICE	REQUESTS AND RESPONSES	x	x		x			x			x	x							
SIGINT CO-ORD	JISR COI SERVICE	REQUESTS AND RESPONSES		x									x							
ISR TRACK	JISR COI SERVICE	SITUATIONAL AWARENESS		x									x							
SIGINT	JISR COI SERVICE	SITUATIONAL AWARENESS		x									x							
METEO INFO	ENVIRONMENTAL COI SERVICE	METEO		x	x	x	x	x	x		x	x	x	x	x	x		x	x	
CONTAMINATION REPORTS	ENVIRONMENTAL COI SERVICE	NBC	x	x	x	x	x	x	x		x	x	x	x	x	x		x	x	
ENVIRONMENTAL UPDATES	ENVIRONMENTAL COI SERVICE	SITUATIONAL AWARENESS	x	x	x				x		x									
REP	ENVIRONMENTAL COI SERVICE	SITUATIONAL AWARENESS		x							x									
CONTRACTING INFO	BUSINESS SUPPORT SERVICE	FINANCIAL SERVICES	x		x															x
OFFICE COLLABORATION (AUDIO)	UNIFIED COMM. & COLLAB. SERVICES	COLLABORATION	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
OFFICE COLLABORATION (AV)	UNIFIED COMM. & COLLAB. SERVICES	COLLABORATION	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
OFFICE COLLABORATION (CHAT)	UNIFIED COMM. & COLLAB. SERVICES	COLLABORATION	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
OFFICE COLLABORATION (WHITEBOARD)	UNIFIED COMM. & COLLAB. SERVICES	COLLABORATION	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
FORMAL MESSAGE	FORMAL MESSAGING SERVICE	FORMAL MESSAGING	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
GEO INFORMATION	GEOSPATIAL SERVICES	GEO SERVICES	x	x	x	x	x		x		x	x	x	x	x					
DIRECTORY SYNC	DIRECTORY SERVICES	DIRECTORY SERVICES	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
INFORMAL MESSAGE	INFORMAL MESSAGING	INFORMAL MESSAGING	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
DOCUMENT COLLABORATION & STORAGE	INFORMATION MANAGEMENT SERVICES	INFORMATION MGT	x	x	x	x	x		x			x	x	x						
PORTAL SERVICES	INFORMATION MANAGEMENT SERVICES	PORTAL SERVICES	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
FAX	FAX	FAX	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
VOICE (NON-SECURE)	VOICE	VOICE	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
VOICE (SECURE)	VOICE	VOICE	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
VTC	VTC	VTC	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
CIS SITREP	JOINT NOC SERVICES	REPORTS	x	x	x	x	x	x	x	x	x	x	x	x	x	x		x	x	
CIS PICTURE	JOINT NOC SERVICES	SITUATIONAL AWARENESS	x	x	x	x	x		x		x	x	x			x		x	x	

D-II-1 Information Exchange Requirements Joint Task Force Headquarters.

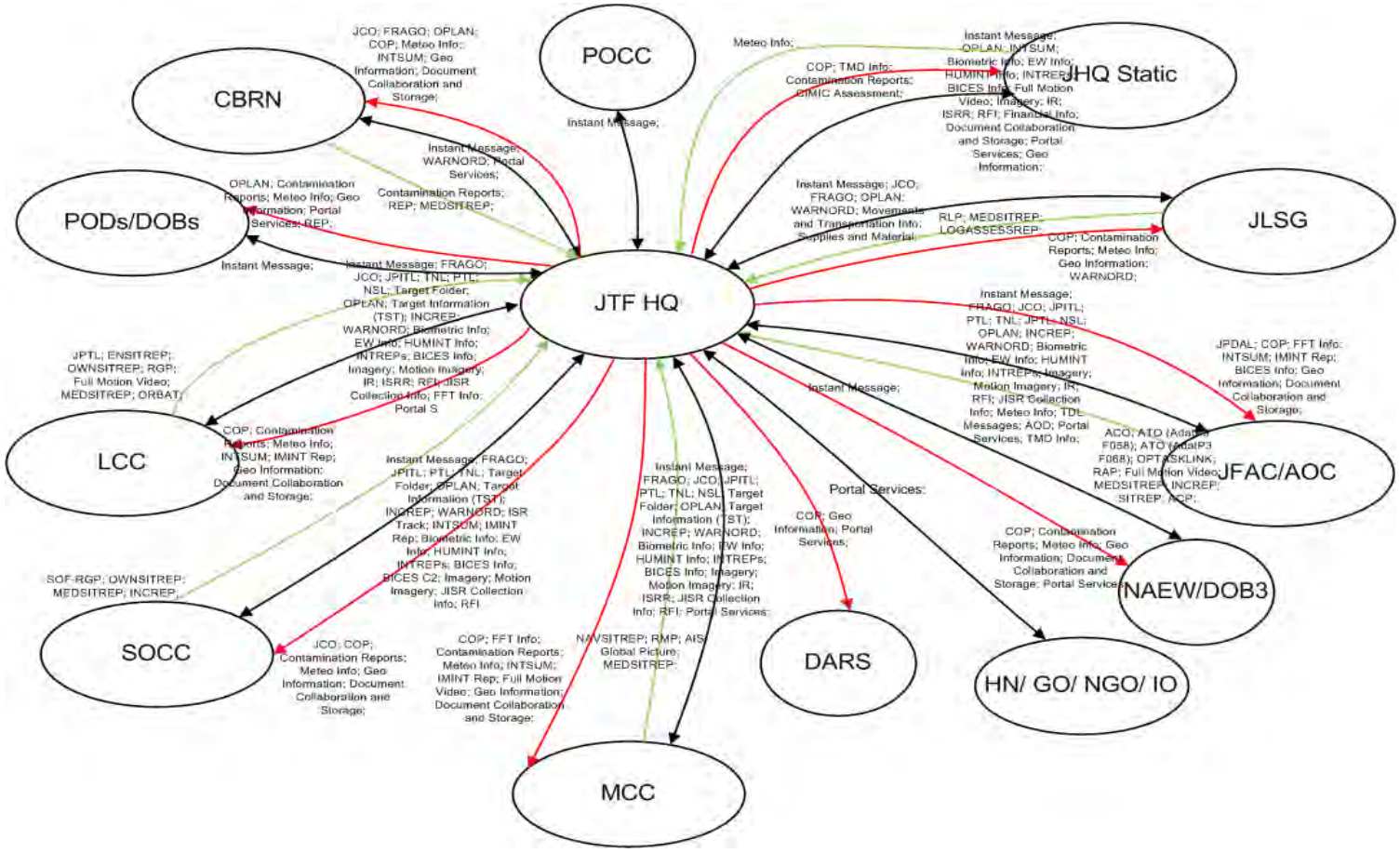

Figure D-II-1-1: C2 Information Product Exchange: JTF HQ

Specific C2 information product exchange for the JTF HQ is depicted in Figure D-II-1-1. The bi-directional black arrow represents bi-directional exchange of information products, further detailed in Table D-II-1-1. The unidirectional red arrow shows information products sent from the JTF HQ to other C2 entities, further detailed in Table D-II-1-2. Finally, the green unidirectional arrows represent information products send to and consumed by the JTF HQ. These product exchanges are further detailed in Table D-II-1-3.

The bi-directional Information Exchange Requirements between the JTF HQ and the other relevant C2 entities, as introduced in Figure D-1-1 and D-II-1-1 are depicted in Table D-II-1-1. The column “IERs To” lists the C2 entity the information products are exchanged with (in both directions), the second column lists the product that is exchanged. The operational capability the product supports is given in column 3, while columns 4 and 5 provide the technical services at Level 2 and Level 1.

The information products disseminated from the JTF HQ to the other relevant C2 entities, as introduced in Figure D-II-1-1, are depicted in Table D-II-1-2.

Finally, Table D-II-1-3 contains the unidirectional information products consumed by the JTF HQ, as introduced in Figure D-II-1-1.

Table D-II-1-1: JTF HQ Bi-Directional IERs

IER TO	IE PRODUCT	USER SERVICE DEFINITION: OPERATIONAL CAPABILITY	TECHNICAL SERVICE LEVEL2	TECHNICAL SERVICE LEVEL 1
JFAC/AOC	AOD	INTENT & GUIDANCE	AIR COI SERVICE	COI SERVICES
JFAC/AOC	TDL MESSAGES	SITUATIONAL AWARENESS	AIR COI SERVICE	COI SERVICES
JFAC/AOC	DIRECTORY SYNC	DIRECTORY SERVICES	DIRECTORY SERVICES	CORE SERVICES
JFAC/AOC	METEO INFO	METEO	ENVIRONMENTAL COI SERVICE	COI SERVICES
JFAC/AOC	FAX	FAX	FAX	CORE SERVICES
JFAC/AOC	FORMAL MESSAGE	FORMAL MESSAGING	FORMAL MESSAGING SERVICE	CORE ENTERPRISE SERVICES
JFAC/AOC	INFORMAL MESSAGE	INFORMAL MESSAGING	INFORMAL MESSAGING	CORE SERVICES
JFAC/AOC	PORTAL SERVICES	PORTAL SERVICES	INFORMATION MANAGEMENT SERVICES	CORE ENTERPRISE SERVICES
JFAC/AOC	IMAGERY	INTEL DATABASE SERVICES	JISR COI SERVICE	COI SERVICES
JFAC/AOC	MOTION IMAGERY	INTEL DATABASE SERVICES	JISR COI SERVICE	COI SERVICES
JFAC/AOC	BIOMETRIC INFO	REPORTS	JISR COI SERVICE	COI SERVICES
JFAC/AOC	EW INFO	REPORTS	JISR COI SERVICE	COI SERVICES
JFAC/AOC	HUMINT INFO	REPORTS	JISR COI SERVICE	COI SERVICES
JFAC/AOC	INTREPS	REPORTS	JISR COI SERVICE	COI SERVICES
JFAC/AOC	IR	REQUESTS AND RESPONSES	JISR COI SERVICE	COI SERVICES
JFAC/AOC	JISR COLLECTION INFO	REQUESTS AND RESPONSES	JISR COI SERVICE	COI SERVICES
JFAC/AOC	RFI	REQUESTS AND RESPONSES	JISR COI SERVICE	COI SERVICES
JFAC/AOC	INSTANT MESSAGE	INSTANT MESSAGING	JOINT COI SERVICE	COI SERVICES
JFAC/AOC	WARNORD	INTENT & GUIDANCE	JOINT COI SERVICE	COI SERVICES
JFAC/AOC	JPITL	JOINT TARGETING	JOINT COI SERVICE	COI SERVICES
JFAC/AOC	JPTL	JOINT TARGETING	JOINT COI SERVICE	COI SERVICES
JFAC/AOC	NSL	JOINT TARGETING	JOINT COI SERVICE	COI SERVICES
JFAC/AOC	PTL	JOINT TARGETING	JOINT COI SERVICE	COI SERVICES
JFAC/AOC	TNL	JOINT TARGETING	JOINT COI SERVICE	COI SERVICES
JFAC/AOC	OPLAN	PLANS	JOINT COI SERVICE	COI SERVICES
JFAC/AOC	INCREP	REPORTS	JOINT COI SERVICE	COI SERVICES
JFAC/AOC	FRAGO	TASKING & ORDERS	JOINT COI SERVICE	COI SERVICES
JFAC/AOC	JCO	TASKING & ORDERS	JOINT COI SERVICE	COI SERVICES
JFAC/AOC	TMD INFO	TMD INFO	MISSILE DEFENCE COI SERVICE	COI SERVICES

IER TO	IE PRODUCT	USER SERVICE DEFINITION: OPERATIONAL CAPABILITY	TECHNICAL SERVICE LEVEL2	TECHNICAL SERVICE LEVEL 1
JFAC/AOC	OFFICE COLLABORATION (AUDIO)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
JFAC/AOC	OFFICE COLLABORATION (AV)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
JFAC/AOC	OFFICE COLLABORATION (CHAT)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
JFAC/AOC	OFFICE COLLABORATION (WHITEBOARD)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
JFAC/AOC	VOICE (NON-SECURE)	VOICE	VOICE	CORE SERVICES
JFAC/AOC	VOICE (SECURE)	VOICE	VOICE	CORE SERVICES
JFAC/AOC	VTC	VTC	VTC	CORE SERVICES
BDE	FAX	FAX	FAX	CORE SERVICES
BDE	INFORMAL MESSAGE	INFORMAL MESSAGING	INFORMAL MESSAGING	CORE SERVICES
BDE	VOICE (NON-SECURE)	VOICE	VOICE	CORE SERVICES
BDE	VOICE (SECURE)	VOICE	VOICE	CORE SERVICES
CBRN	DIRECTORY SYNC	DIRECTORY SERVICES	DIRECTORY SERVICES	CORE SERVICES
CBRN	FAX	FAX	FAX	CORE SERVICES
CBRN	FORMAL MESSAGE	FORMAL MESSAGING	FORMAL MESSAGING SERVICE	CORE ENTERPRISE SERVICES
CBRN	INFORMAL MESSAGE	INFORMAL MESSAGING	INFORMAL MESSAGING	CORE SERVICES
CBRN	PORTAL SERVICES	PORTAL SERVICES	INFORMATION MANAGEMENT SERVICES	CORE ENTERPRISE SERVICES
CBRN	INSTANT MESSAGE	INSTANT MESSAGING	JOINT COI SERVICE	COI SERVICES
CBRN	WARNORD	INTENT & GUIDANCE	JOINT COI SERVICE	COI SERVICES
CBRN	VOICE (NON-SECURE)	VOICE	VOICE	CORE SERVICES
CBRN	VOICE (SECURE)	VOICE	VOICE	CORE SERVICES
CBRN	VTC	VTC	VTC	CORE SERVICES
DARS	FAX	FAX	FAX	CORE SERVICES
DARS	INFORMAL MESSAGE	INFORMAL MESSAGING	INFORMAL MESSAGING	CORE SERVICES
DARS	PORTAL SERVICES	PORTAL SERVICES	INFORMATION MANAGEMENT SERVICES	CORE ENTERPRISE SERVICES
DARS	VOICE (NON-SECURE)	VOICE	VOICE	CORE SERVICES
DARS	VOICE (SECURE)	VOICE	VOICE	CORE SERVICES
DOB1/APOD	FAX	FAX	FAX	CORE SERVICES
DOB1/APOD	INFORMAL MESSAGE	INFORMAL MESSAGING	INFORMAL MESSAGING	CORE SERVICES
DOB1/APOD	PORTAL SERVICES	PORTAL SERVICES	INFORMATION MANAGEMENT SERVICES	CORE ENTERPRISE SERVICES
DOB1/APOD	WARNORD	INTENT & GUIDANCE	JOINT COI SERVICE	COI SERVICES
DOB1/APOD	VOICE (NON-SECURE)	VOICE	VOICE	CORE SERVICES
DOB1/APOD	VOICE (SECURE)	VOICE	VOICE	CORE SERVICES
DOB1/APOD	VTC	VTC	VTC	CORE SERVICES
HN/ GO/ NGO/ IO	FAX	FAX	FAX	CORE SERVICES
HN/ GO/ NGO/ IO	INFORMAL MESSAGE	INFORMAL MESSAGING	INFORMAL MESSAGING	CORE SERVICES
HN/ GO/ NGO/ IO	PORTAL SERVICES	PORTAL SERVICES	INFORMATION MANAGEMENT SERVICES	CORE ENTERPRISE SERVICES
HN/ GO/ NGO/ IO	VOICE (NON-SECURE)	VOICE	VOICE	CORE SERVICES
JHQ STATIC	DIRECTORY SYNC	DIRECTORY SERVICES	DIRECTORY SERVICES	CORE SERVICES
JHQ STATIC	FAX	FAX	FAX	CORE SERVICES
JHQ STATIC	FORMAL MESSAGE	FORMAL MESSAGING	FORMAL MESSAGING SERVICE	CORE ENTERPRISE SERVICES
JHQ STATIC	GEO INFORMATION	GEO SERVICES	GEOSPATIAL SERVICES	CORE ENTERPRISE SERVICES
JHQ STATIC	INFORMAL MESSAGE	INFORMAL MESSAGING	INFORMAL MESSAGING	CORE SERVICES
JHQ STATIC	DOCUMENT COLLABORATION & STORAGE	INFORMATION MGT	INFORMATION MANAGEMENT SERVICES	CORE ENTERPRISE SERVICES
JHQ STATIC	PORTAL SERVICES	PORTAL SERVICES	INFORMATION MANAGEMENT SERVICES	CORE ENTERPRISE SERVICES
JHQ STATIC	BICES INFO	BICES INFO	JISR COI SERVICE	COI SERVICES
JHQ STATIC	IMAGERY	INTEL DATABASE SERVICES	JISR COI SERVICE	COI SERVICES
JHQ STATIC	MOTION IMAGERY	INTEL DATABASE SERVICES	JISR COI SERVICE	COI SERVICES
JHQ STATIC	BIOMETRIC INFO	REPORTS	JISR COI SERVICE	COI SERVICES
JHQ STATIC	EW INFO	REPORTS	JISR COI SERVICE	COI SERVICES
JHQ STATIC	HUMINT INFO	REPORTS	JISR COI SERVICE	COI SERVICES
JHQ STATIC	INTREPS	REPORTS	JISR COI SERVICE	COI SERVICES
JHQ STATIC	INTSUM	REPORTS	JISR COI SERVICE	COI SERVICES
JHQ STATIC	JISR COLLECTION INFO	REQUESTS AND RESPONSES	JISR COI SERVICE	COI SERVICES
JHQ STATIC	RFI	REQUESTS AND RESPONSES	JISR COI SERVICE	COI SERVICES
JHQ STATIC	INSTANT MESSAGE	INSTANT MESSAGING	JOINT COI SERVICE	COI SERVICES
JHQ STATIC	OPLAN	PLANS	JOINT COI SERVICE	COI SERVICES
JHQ STATIC	OFFICE COLLABORATION (AUDIO)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
JHQ STATIC	OFFICE COLLABORATION (AV)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
JHQ STATIC	OFFICE COLLABORATION (CHAT)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
JHQ STATIC	OFFICE COLLABORATION (WHITEBOARD)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES

IER TO	IE PRODUCT	USER SERVICE DEFINITION: OPERATIONAL CAPABILITY	TECHNICAL SERVICE LEVEL2	TECHNICAL SERVICE LEVEL 1
JHQ STATIC	VOICE (NON-SECURE)	VOICE	VOICE	CORE SERVICES
JHQ STATIC	VOICE (SECURE)	VOICE	VOICE	CORE SERVICES
JHQ STATIC	VTC	VTC	VTC	CORE SERVICES
JLSG	DIRECTORY SYNC	DIRECTORY SERVICES	DIRECTORY SERVICES	CORE SERVICES
JLSG	FAX	FAX	FAX	CORE SERVICES
JLSG	FORMAL MESSAGE	FORMAL MESSAGING	FORMAL MESSAGING SERVICE	CORE ENTERPRISE SERVICES
JLSG	INFORMAL MESSAGE	INFORMAL MESSAGING	INFORMAL MESSAGING	CORE SERVICES
JLSG	INSTANT MESSAGE	INSTANT MESSAGING	JOINT COI SERVICE	COI SERVICES
JLSG	WARNORD	INTENT & GUIDANCE	JOINT COI SERVICE	COI SERVICES
JLSG	OPLAN	PLANS	JOINT COI SERVICE	COI SERVICES
JLSG	FRAGO	TASKING & ORDERS	JOINT COI SERVICE	COI SERVICES
JLSG	JCO	TASKING & ORDERS	JOINT COI SERVICE	COI SERVICES
JLSG	MOVEMENTS AND TRANSPORTATION INFO	REPORTS	LOGISTICS COI SERVICE	COI SERVICES
JLSG	SUPPLIES AND MATERIAL	RESOURCE STATUS	LOGISTICS COI SERVICE	COI SERVICES
JLSG	VOICE (NON-SECURE)	VOICE	VOICE	CORE SERVICES
JLSG	VOICE (SECURE)	VOICE	VOICE	CORE SERVICES
JLSG	VTC	VTC	VTC	CORE SERVICES
LCC	DIRECTORY SYNC	DIRECTORY SERVICES	DIRECTORY SERVICES	CORE SERVICES
LCC	FAX	FAX	FAX	CORE SERVICES
LCC	FORMAL MESSAGE	FORMAL MESSAGING	FORMAL MESSAGING SERVICE	CORE ENTERPRISE SERVICES
LCC	INFORMAL MESSAGE	INFORMAL MESSAGING	INFORMAL MESSAGING	CORE SERVICES
LCC	PORTAL SERVICES	PORTAL SERVICES	INFORMATION MANAGEMENT SERVICES	CORE ENTERPRISE SERVICES
LCC	BICES INFO	BICES INFO	JISR COI SERVICE	COI SERVICES
LCC	IMAGERY	INTEL DATABASE SERVICES	JISR COI SERVICE	COI SERVICES
LCC	MOTION IMAGERY	INTEL DATABASE SERVICES	JISR COI SERVICE	COI SERVICES
LCC	BIOMETRIC INFO	REPORTS	JISR COI SERVICE	COI SERVICES
LCC	EW INFO	REPORTS	JISR COI SERVICE	COI SERVICES
LCC	HUMINT INFO	REPORTS	JISR COI SERVICE	COI SERVICES
LCC	INTREPS	REPORTS	JISR COI SERVICE	COI SERVICES
LCC	IR	REQUESTS AND RESPONSES	JISR COI SERVICE	COI SERVICES
LCC	ISRR	REQUESTS AND RESPONSES	JISR COI SERVICE	COI SERVICES
LCC	JISR COLLECTION INFO	REQUESTS AND RESPONSES	JISR COI SERVICE	COI SERVICES
LCC	RFI	REQUESTS AND RESPONSES	JISR COI SERVICE	COI SERVICES
LCC	INSTANT MESSAGE	INSTANT MESSAGING	JOINT COI SERVICE	COI SERVICES
LCC	WARNORD	INTENT & GUIDANCE	JOINT COI SERVICE	COI SERVICES
LCC	JPITL	JOINT TARGETING	JOINT COI SERVICE	COI SERVICES
LCC	NSL	JOINT TARGETING	JOINT COI SERVICE	COI SERVICES
LCC	PTL	JOINT TARGETING	JOINT COI SERVICE	COI SERVICES
LCC	TARGET FOLDER	JOINT TARGETING	JOINT COI SERVICE	COI SERVICES
LCC	TNL	JOINT TARGETING	JOINT COI SERVICE	COI SERVICES
LCC	OPLAN	PLANS	JOINT COI SERVICE	COI SERVICES
LCC	INCREP	REPORTS	JOINT COI SERVICE	COI SERVICES
LCC	FRAGO	TASKING & ORDERS	JOINT COI SERVICE	COI SERVICES
LCC	JCO	TASKING & ORDERS	JOINT COI SERVICE	COI SERVICES
LCC	TARGET INFORMATION (TST)	TIME SENSITIVE TARGETING	JOINT COI SERVICE	COI SERVICES
LCC	FFT INFO	FFT	SITUATIONAL AWARENESS SERVICE	COI SERVICES
LCC	OFFICE COLLABORATION (AUDIO)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
LCC	OFFICE COLLABORATION (AV)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
LCC	OFFICE COLLABORATION (CHAT)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
LCC	OFFICE COLLABORATION (WHITEBOARD)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
LCC	VOICE (NON-SECURE)	VOICE	VOICE	CORE SERVICES
LCC	VOICE (SECURE)	VOICE	VOICE	CORE SERVICES
LCC	VTC	VTC	VTC	CORE SERVICES
MCC	DIRECTORY SYNC	DIRECTORY SERVICES	DIRECTORY SERVICES	CORE SERVICES
MCC	FAX	FAX	FAX	CORE SERVICES
MCC	FORMAL MESSAGE	FORMAL MESSAGING	FORMAL MESSAGING SERVICE	CORE ENTERPRISE SERVICES
MCC	INFORMAL MESSAGE	INFORMAL MESSAGING	INFORMAL MESSAGING	CORE SERVICES
MCC	PORTAL SERVICES	PORTAL SERVICES	INFORMATION MANAGEMENT SERVICES	CORE ENTERPRISE SERVICES
MCC	BICES INFO	BICES INFO	JISR COI SERVICE	COI SERVICES
MCC	IMAGERY	INTEL DATABASE SERVICES	JISR COI SERVICE	COI SERVICES

IER TO	IE PRODUCT	USER SERVICE DEFINITION: OPERATIONAL CAPABILITY	TECHNICAL SERVICE LEVEL2	TECHNICAL SERVICE LEVEL 1
MCC	MOTION IMAGERY	INTEL DATABASE SERVICES	JISR COI SERVICE	COI SERVICES
MCC	BIOMETRIC INFO	REPORTS	JISR COI SERVICE	COI SERVICES
MCC	EW INFO	REPORTS	JISR COI SERVICE	COI SERVICES
MCC	HUMINT INFO	REPORTS	JISR COI SERVICE	COI SERVICES
MCC	INTREPS	REPORTS	JISR COI SERVICE	COI SERVICES
MCC	IR	REQUESTS AND RESPONSES	JISR COI SERVICE	COI SERVICES
MCC	ISRR	REQUESTS AND RESPONSES	JISR COI SERVICE	COI SERVICES
MCC	JISR COLLECTION INFO	REQUESTS AND RESPONSES	JISR COI SERVICE	COI SERVICES
MCC	RFI	REQUESTS AND RESPONSES	JISR COI SERVICE	COI SERVICES
MCC	INSTANT MESSAGE	INSTANT MESSAGING	JOINT COI SERVICE	COI SERVICES
MCC	WARNORD	INTENT & GUIDANCE	JOINT COI SERVICE	COI SERVICES
MCC	JPITL	JOINT TARGETING	JOINT COI SERVICE	COI SERVICES
MCC	NSL	JOINT TARGETING	JOINT COI SERVICE	COI SERVICES
MCC	PTL	JOINT TARGETING	JOINT COI SERVICE	COI SERVICES
MCC	TARGET FOLDER	JOINT TARGETING	JOINT COI SERVICE	COI SERVICES
MCC	TNL	JOINT TARGETING	JOINT COI SERVICE	COI SERVICES
MCC	OPLAN	PLANS	JOINT COI SERVICE	COI SERVICES
MCC	INCREP	REPORTS	JOINT COI SERVICE	COI SERVICES
MCC	FRAGO	TASKING & ORDERS	JOINT COI SERVICE	COI SERVICES
MCC	JCO	TASKING & ORDERS	JOINT COI SERVICE	COI SERVICES
MCC	TARGET INFORMATION (TST)	TIME SENSITIVE TARGETING	JOINT COI SERVICE	COI SERVICES
MCC	OFFICE COLLABORATION (AUDIO)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
MCC	OFFICE COLLABORATION (AV)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
MCC	OFFICE COLLABORATION (CHAT)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
MCC	OFFICE COLLABORATION (WHITEBOARD)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
MCC	VOICE (NON-SECURE)	VOICE	VOICE	CORE SERVICES
MCC	VOICE (SECURE)	VOICE	VOICE	CORE SERVICES
MCC	VTC	VTC	VTC	CORE SERVICES
NAEW/DOB3	DIRECTORY SYNC	DIRECTORY SERVICES	DIRECTORY SERVICES	CORE SERVICES
NAEW/DOB3	FAX	FAX	FAX	CORE SERVICES
NAEW/DOB3	FORMAL MESSAGE	FORMAL MESSAGING	FORMAL MESSAGING SERVICE	CORE ENTERPRISE SERVICES
NAEW/DOB3	INFORMAL MESSAGE	INFORMAL MESSAGING	INFORMAL MESSAGING	CORE SERVICES
NAEW/DOB3	INSTANT MESSAGE	INSTANT MESSAGING	JOINT COI SERVICE	COI SERVICES
NAEW/DOB3	VOICE (NON-SECURE)	VOICE	VOICE	CORE SERVICES
NAEW/DOB3	VOICE (SECURE)	VOICE	VOICE	CORE SERVICES
NAEW/DOB3	VTC	VTC	VTC	CORE SERVICES
POCC	FAX	FAX	FAX	CORE SERVICES
POCC	FORMAL MESSAGE	FORMAL MESSAGING	FORMAL MESSAGING SERVICE	CORE ENTERPRISE SERVICES
POCC	INFORMAL MESSAGE	INFORMAL MESSAGING	INFORMAL MESSAGING	CORE SERVICES
POCC	INSTANT MESSAGE	INSTANT MESSAGING	JOINT COI SERVICE	COI SERVICES
POCC	VOICE (NON-SECURE)	VOICE	VOICE	CORE SERVICES
POCC	VOICE (SECURE)	VOICE	VOICE	CORE SERVICES
POCC	VTC	VTC	VTC	CORE SERVICES
PODS/DOBS	DIRECTORY SYNC	DIRECTORY SERVICES	DIRECTORY SERVICES	CORE SERVICES
PODS/DOBS	FAX	FAX	FAX	CORE SERVICES
PODS/DOBS	FORMAL MESSAGE	FORMAL MESSAGING	FORMAL MESSAGING SERVICE	CORE ENTERPRISE SERVICES
PODS/DOBS	INFORMAL MESSAGE	INFORMAL MESSAGING	INFORMAL MESSAGING	CORE SERVICES
PODS/DOBS	INSTANT MESSAGE	INSTANT MESSAGING	JOINT COI SERVICE	COI SERVICES
PODS/DOBS	VOICE (NON-SECURE)	VOICE	VOICE	CORE SERVICES
PODS/DOBS	VOICE (SECURE)	VOICE	VOICE	CORE SERVICES
PODS/DOBS	VTC	VTC	VTC	CORE SERVICES
SOCC	DIRECTORY SYNC	DIRECTORY SERVICES	DIRECTORY SERVICES	CORE SERVICES
SOCC	FAX	FAX	FAX	CORE SERVICES
SOCC	FORMAL MESSAGE	FORMAL MESSAGING	FORMAL MESSAGING SERVICE	CORE ENTERPRISE SERVICES
SOCC	INFORMAL MESSAGE	INFORMAL MESSAGING	INFORMAL MESSAGING	CORE SERVICES
SOCC	PORTAL SERVICES	PORTAL SERVICES	INFORMATION MANAGEMENT SERVICES	CORE ENTERPRISE SERVICES
SOCC	BICES C2	BICES C2	JISR COI SERVICE	COI SERVICES
SOCC	BICES INFO	BICES INFO	JISR COI SERVICE	COI SERVICES
SOCC	IMAGERY	INTEL DATABASE SERVICES	JISR COI SERVICE	COI SERVICES
SOCC	MOTION IMAGERY	INTEL DATABASE SERVICES	JISR COI SERVICE	COI SERVICES

IER TO	IE PRODUCT	USER SERVICE DEFINITION: OPERATIONAL CAPABILITY	TECHNICAL SERVICE LEVEL2	TECHNICAL SERVICE LEVEL 1
SOCC	BIOMETRIC INFO	REPORTS	JISR COI SERVICE	COI SERVICES
SOCC	EW INFO	REPORTS	JISR COI SERVICE	COI SERVICES
SOCC	HUMINT INFO	REPORTS	JISR COI SERVICE	COI SERVICES
SOCC	IMINT REP	REPORTS	JISR COI SERVICE	COI SERVICES
SOCC	INTREPS	REPORTS	JISR COI SERVICE	COI SERVICES
SOCC	INTSUM	REPORTS	JISR COI SERVICE	COI SERVICES
SOCC	JISR COLLECTION INFO	REQUESTS AND RESPONSES	JISR COI SERVICE	COI SERVICES
SOCC	RFI	REQUESTS AND RESPONSES	JISR COI SERVICE	COI SERVICES
SOCC	SIGINT CO-ORD	REQUESTS AND RESPONSES	JISR COI SERVICE	COI SERVICES
SOCC	ISR TRACK	SITUATIONAL AWARENESS	JISR COI SERVICE	COI SERVICES
SOCC	INSTANT MESSAGE	INSTANT MESSAGING	JOINT COI SERVICE	COI SERVICES
SOCC	WARNORD	INTENT & GUIDANCE	JOINT COI SERVICE	COI SERVICES
SOCC	JPITL	JOINT TARGETING	JOINT COI SERVICE	COI SERVICES
SOCC	PTL	JOINT TARGETING	JOINT COI SERVICE	COI SERVICES
SOCC	TARGET FOLDER	JOINT TARGETING	JOINT COI SERVICE	COI SERVICES
SOCC	TNL	JOINT TARGETING	JOINT COI SERVICE	COI SERVICES
SOCC	OPLAN	PLANS	JOINT COI SERVICE	COI SERVICES
SOCC	INCREP	REPORTS	JOINT COI SERVICE	COI SERVICES
SOCC	FRAGO	TASKING & ORDERS	JOINT COI SERVICE	COI SERVICES
SOCC	TARGET INFORMATION (TST)	TIME SENSITIVE TARGETING	JOINT COI SERVICE	COI SERVICES
SOCC	FFT INFO	FFT	SITUATIONAL AWARENESS SERVICE	COI SERVICES
SOCC	OFFICE COLLABORATION (AUDIO)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
SOCC	OFFICE COLLABORATION (AV)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
SOCC	OFFICE COLLABORATION (CHAT)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
SOCC	OFFICE COLLABORATION (WHITEBOARD)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
SOCC	VOICE (NON-SECURE)	VOICE	VOICE	CORE SERVICES
SOCC	VOICE (SECURE)	VOICE	VOICE	CORE SERVICES
SOCC	VTC	VTC	VTC	CORE SERVICES

Table D-II-1-2: JTF HQ Uni-Directional Information Product Disseminated

IER TO	IE PRODUCT	USER SERVICE DEFINITION: OPERATIONAL CAPABILITY	TECHNICAL SERVICE LEVEL2	TECHNICAL SERVICE LEVEL 1
JFAC/AOC	GEO INFORMATION	GEO SERVICES	GEOSPATIAL SERVICES	CORE ENTERPRISE SERVICES
JFAC/AOC	DOCUMENT COLLABORATION AND STORAGE	INFORMATION MGT	INFORMATION MANAGEMENT SERVICES	CORE ENTERPRISE SERVICES
JFAC/AOC	BICES INFO	BICES INFO	JISR COI SERVICE	COI SERVICES
JFAC/AOC	IMINT REP	REPORTS	JISR COI SERVICE	COI SERVICES
JFAC/AOC	INTSUM	REPORTS	JISR COI SERVICE	COI SERVICES
JFAC/AOC	JPDAL	PLANS	JOINT COI SERVICE	COI SERVICES
JFAC/AOC	COP	SITUATIONAL AWARENESS	JOINT COI SERVICE	COI SERVICES
JFAC/AOC	CIS PICTURE	SITUATIONAL AWARENESS	JOINT NOC SERVICES	SMC
JFAC/AOC	FFT INFO	FFT	SITUATIONAL AWARENESS SERVICE	COI SERVICES
CBRN	METEO INFO	METEO	ENVIRONMENTAL COI SERVICE	COI SERVICES
CBRN	GEO INFORMATION	GEO SERVICES	GEOSPATIAL SERVICES	CORE ENTERPRISE SERVICES
CBRN	DOCUMENT COLLABORATION AND STORAGE	INFORMATION MGT	INFORMATION MANAGEMENT SERVICES	CORE ENTERPRISE SERVICES
CBRN	INTSUM	REPORTS	JISR COI SERVICE	COI SERVICES
CBRN	OPLAN	PLANS	JOINT COI SERVICE	COI SERVICES
CBRN	COP	SITUATIONAL AWARENESS	JOINT COI SERVICE	COI SERVICES
CBRN	FRAGO	TASKING & ORDERS	JOINT COI SERVICE	COI SERVICES
CBRN	JCO	TASKING & ORDERS	JOINT COI SERVICE	COI SERVICES
CBRN	CIS PICTURE	SITUATIONAL AWARENESS	JOINT NOC SERVICES	SMC
DARS	GEO INFORMATION	GEO SERVICES	GEOSPATIAL SERVICES	CORE ENTERPRISE SERVICES
DARS	PORTAL SERVICES	PORTAL SERVICES	INFORMATION MANAGEMENT SERVICES	CORE ENTERPRISE SERVICES
DARS	COP	SITUATIONAL AWARENESS	JOINT COI SERVICE	COI SERVICES
DOB1/APOD	PORTAL SERVICES	PORTAL SERVICES	INFORMATION MANAGEMENT SERVICES	CORE ENTERPRISE SERVICES
JHQ STATIC	CIMIC ASSESSMENT	SITUATIONAL AWARENESS	CIMIC COI SERVICE	COI SERVICES
JHQ STATIC	CONTAMINATION REPORTS	NBC	ENVIRONMENTAL COI SERVICE	COI SERVICES
JHQ STATIC	COP	SITUATIONAL AWARENESS	JOINT COI SERVICE	COI SERVICES
JHQ STATIC	CIS PICTURE	SITUATIONAL AWARENESS	JOINT NOC SERVICES	SMC
JHQ STATIC	TMD INFO	TMD INFO	MISSILE DEFENCE COI SERVICE	COI SERVICES
JLSG	METEO INFO	METEO	ENVIRONMENTAL COI SERVICE	COI SERVICES
JLSG	CONTAMINATION REPORTS	NBC	ENVIRONMENTAL COI SERVICE	COI SERVICES
JLSG	GEO INFORMATION	GEO SERVICES	GEOSPATIAL SERVICES	CORE ENTERPRISE SERVICES
JLSG	WARNORD	INTENT & GUIDANCE	JOINT COI SERVICE	COI SERVICES
JLSG	COP	SITUATIONAL AWARENESS	JOINT COI SERVICE	COI SERVICES
JLSG	CIS PICTURE	SITUATIONAL AWARENESS	JOINT NOC SERVICES	SMC
LCC	METEO INFO	METEO	ENVIRONMENTAL COI SERVICE	COI SERVICES
LCC	CONTAMINATION REPORTS	NBC	ENVIRONMENTAL COI SERVICE	COI SERVICES
LCC	GEO INFORMATION	GEO SERVICES	GEOSPATIAL SERVICES	CORE ENTERPRISE SERVICES
LCC	DOCUMENT COLLABORATION AND STORAGE	INFORMATION MGT	INFORMATION MANAGEMENT SERVICES	CORE ENTERPRISE SERVICES
LCC	IMINT REP	REPORTS	JISR COI SERVICE	COI SERVICES
LCC	INTSUM	REPORTS	JISR COI SERVICE	COI SERVICES
LCC	COP	SITUATIONAL AWARENESS	JOINT COI SERVICE	COI SERVICES
LCC	CIS PICTURE	SITUATIONAL AWARENESS	JOINT NOC SERVICES	SMC
MCC	METEO INFO	METEO	ENVIRONMENTAL COI SERVICE	COI SERVICES
MCC	CONTAMINATION REPORTS	NBC	ENVIRONMENTAL COI SERVICE	COI SERVICES
MCC	GEO INFORMATION	GEO SERVICES	GEOSPATIAL SERVICES	CORE ENTERPRISE SERVICES
MCC	DOCUMENT COLLABORATION AND STORAGE	INFORMATION MGT	INFORMATION MANAGEMENT SERVICES	CORE ENTERPRISE SERVICES
MCC	FULL MOTION VIDEO	FULL MOTION VIDEO	JISR COI SERVICE	COI SERVICES
MCC	IMINT REP	REPORTS	JISR COI SERVICE	COI SERVICES
MCC	INTSUM	REPORTS	JISR COI SERVICE	COI SERVICES
MCC	COP	SITUATIONAL AWARENESS	JOINT COI SERVICE	COI SERVICES
MCC	CIS PICTURE	SITUATIONAL AWARENESS	JOINT NOC SERVICES	SMC
MCC	FFT INFO	FFT	SITUATIONAL AWARENESS SERVICE	COI SERVICES
NAEW/DOB3	METEO INFO	METEO	ENVIRONMENTAL COI SERVICE	COI SERVICES
NAEW/DOB3	CONTAMINATION REPORTS	NBC	ENVIRONMENTAL COI SERVICE	COI SERVICES
NAEW/DOB3	GEO INFORMATION	GEO SERVICES	GEOSPATIAL SERVICES	CORE ENTERPRISE SERVICES
NAEW/DOB3	DOCUMENT COLLABORATION AND STORAGE	INFORMATION MGT	INFORMATION MANAGEMENT SERVICES	CORE ENTERPRISE SERVICES
NAEW/DOB3	PORTAL SERVICES	PORTAL SERVICES	INFORMATION MANAGEMENT SERVICES	CORE ENTERPRISE SERVICES
NAEW/DOB3	COP	SITUATIONAL AWARENESS	JOINT COI SERVICE	COI SERVICES
NAEW/DOB3	CIS PICTURE	SITUATIONAL AWARENESS	JOINT NOC SERVICES	SMC
PODS/DOBS	METEO INFO	METEO	ENVIRONMENTAL COI SERVICE	COI SERVICES
PODS/DOBS	CONTAMINATION REPORTS	NBC	ENVIRONMENTAL COI SERVICE	COI SERVICES
PODS/DOBS	REP	SITUATIONAL AWARENESS	ENVIRONMENTAL COI SERVICE	COI SERVICES
PODS/DOBS	GEO INFORMATION	GEO SERVICES	GEOSPATIAL SERVICES	CORE ENTERPRISE SERVICES
PODS/DOBS	PORTAL SERVICES	PORTAL SERVICES	INFORMATION MANAGEMENT SERVICES	CORE ENTERPRISE SERVICES
PODS/DOBS	OPLAN	PLANS	JOINT COI SERVICE	COI SERVICES
PODS/DOBS	CIS PICTURE	SITUATIONAL AWARENESS	JOINT NOC SERVICES	SMC
SOCC	METEO INFO	METEO	ENVIRONMENTAL COI SERVICE	COI SERVICES
SOCC	CONTAMINATION REPORTS	NBC	ENVIRONMENTAL COI SERVICE	COI SERVICES
SOCC	GEO INFORMATION	GEO SERVICES	GEOSPATIAL SERVICES	CORE ENTERPRISE SERVICES
SOCC	DOCUMENT COLLABORATION AND STORAGE	INFORMATION MGT	INFORMATION MANAGEMENT SERVICES	CORE ENTERPRISE SERVICES
SOCC	COP	SITUATIONAL AWARENESS	JOINT COI SERVICE	COI SERVICES
SOCC	JCO	TASKING & ORDERS	JOINT COI SERVICE	COI SERVICES
SOCC	CIS PICTURE	SITUATIONAL AWARENESS	JOINT NOC SERVICES	SMC

Table D-II-1-3: JTF HQ Uni-directional Information Products Consumed

IER FROM	IE PRODUCT	USER SERVICE DEFINITION: OPERATIONAL CAPABILITY	TECHNICAL SERVICE LEVEL2	TECHNICAL SERVICE LEVEL 1
JFAC/AOC	ACP	PLANS	AIR COI SERVICE	COI SERVICES
JFAC/AOC	SITREP	REPORTS	AIR COI SERVICE	COI SERVICES
JFAC/AOC	RAP	SITUATIONAL AWARENESS	AIR COI SERVICE	COI SERVICES
JFAC/AOC	ACO	TASKING & ORDERS	AIR COI SERVICE	COI SERVICES
JFAC/AOC	ATO (ADATP3 F058)	TASKING & ORDERS	AIR COI SERVICE	COI SERVICES
JFAC/AOC	ATO (ADATP3 F068)	TASKING & ORDERS	AIR COI SERVICE	COI SERVICES
JFAC/AOC	OPTASKLINK	TASKING & ORDERS	AIR COI SERVICE	COI SERVICES
JFAC/AOC	FULL MOTION VIDEO	FULL MOTION VIDEO	JISR COI SERVICE	COI SERVICES
JFAC/AOC	INCREP	REPORTS	JOINT COI SERVICE	COI SERVICES
JFAC/AOC	CIS SITREP	REPORTS	JOINT NOC SERVICES	SMC
JFAC/AOC	MEDSITREP	MEDICAL	LOGISTICS COI SERVICE	COI SERVICES
CBRN	CONTAMINATION REPORTS	NBC	ENVIRONMENTAL COI SERVICE	COI SERVICES
CBRN	REP	SITUATIONAL AWARENESS	ENVIRONMENTAL COI SERVICE	COI SERVICES
CBRN	CIS SITREP	REPORTS	JOINT NOC SERVICES	SMC
CBRN	MEDSITREP	MEDICAL	LOGISTICS COI SERVICE	COI SERVICES
DARS	CIS SITREP	REPORTS	JOINT NOC SERVICES	SMC
JHQ STATIC	METEO INFO	METEO	ENVIRONMENTAL COI SERVICE	COI SERVICES
JLSG	CIS SITREP	REPORTS	JOINT NOC SERVICES	SMC
JLSG	MEDSITREP	MEDICAL	LOGISTICS COI SERVICE	COI SERVICES
JLSG	LOGASSESSREP	REPORTS	LOGISTICS COI SERVICE	COI SERVICES
JLSG	RLP	SITUATIONAL AWARENESS	LOGISTICS COI SERVICE	COI SERVICES
LCC	FULL MOTION VIDEO	FULL MOTION VIDEO	JISR COI SERVICE	COI SERVICES
LCC	ORBAT	INTENT & GUIDANCE	JOINT COI SERVICE	COI SERVICES
LCC	JPTL	JOINT TARGETING	JOINT COI SERVICE	COI SERVICES
LCC	CIS SITREP	REPORTS	JOINT NOC SERVICES	SMC
LCC	ENSITREP	REPORTS	LAND COI SERVICE	COI SERVICES
LCC	OWNSITREP	REPORTS	LAND COI SERVICE	COI SERVICES
LCC	RGP	SITUATIONAL AWARENESS	LAND COI SERVICE	COI SERVICES
LCC	MEDSITREP	MEDICAL	LOGISTICS COI SERVICE	COI SERVICES
MCC	CIS SITREP	REPORTS	JOINT NOC SERVICES	SMC
MCC	MEDSITREP	MEDICAL	LOGISTICS COI SERVICE	COI SERVICES
MCC	NAVSITREP	REPORTS	MARITIME COI SERVICE	COI SERVICES
MCC	AIS GLOBAL PICTURE	SITUATIONAL AWARENESS	MARITIME COI SERVICE	COI SERVICES
MCC	RMP	SITUATIONAL AWARENESS	MARITIME COI SERVICE	COI SERVICES
SOCC	INCREP	REPORTS	JOINT COI SERVICE	COI SERVICES
SOCC	CIS SITREP	REPORTS	JOINT NOC SERVICES	SMC
SOCC	OWNSITREP	REPORTS	LAND COI SERVICE	COI SERVICES
SOCC	MEDSITREP	MEDICAL	LOGISTICS COI SERVICE	COI SERVICES
SOCC	SOF-RGP	SITUATIONAL AWARENESS	SPECIAL OPERATIONS COI SERVICE	COI SERVICES

D-II-2 Information Exchange Requirements LCC.

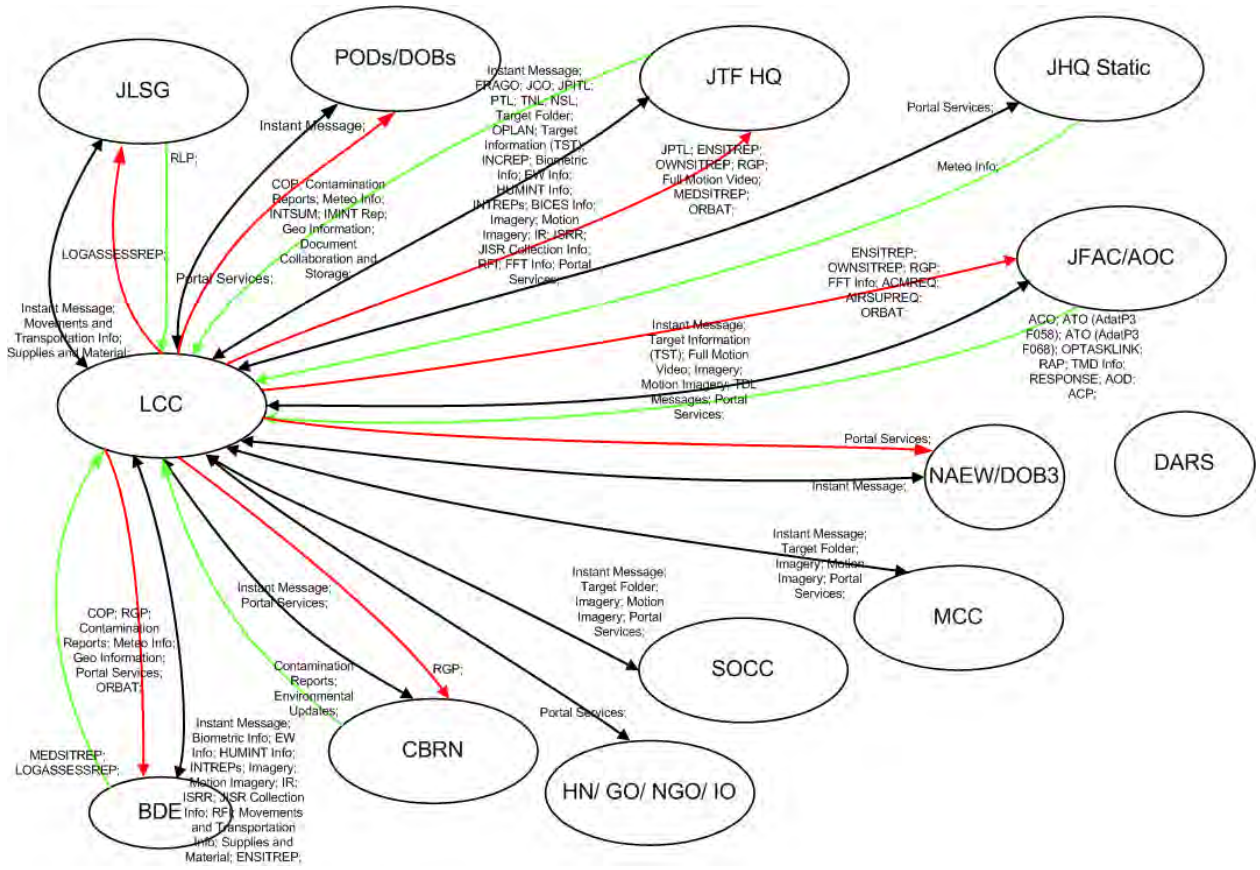

Figure D-II-2-1: C2 Information Product Exchange: LCC

Specific C2 information product exchange for the LCC is depicted in Figure D-II-2-1. The bi-directional black arrow represents bi-directional exchange of information products, further detailed in Table D-II-2-1. The unidirectional red arrow shows information products sent from the LCC to other C2 entities, further detailed in Table D-II-2-2. Finally, the green unidirectional arrows represent information products send to and consumed by the LCC. These product exchanges are further detailed in Table D-II-2-3.

The bi-directional Information Exchange Requirements between the LCC and the other relevant C2 entities, as introduced in Figure D-1-1 and D-II-2-1 are depicted in Table D-II-2-1. The column “IERs To” lists the C2 entity the information products are exchanged with (in both directions), the second column lists the product that is exchanged. The operational capability the product supports is given in column 3, while columns 4 and 5 provide the technical services at Level 2 and Level 1.

The information products disseminated from the LCC to the other relevant C2 entities, as introduced in Figure D-II-2-1, are depicted in Table D-II-2-2.

Finally, Table D-II-2-3 contains the unidirectional information products consumed by the LCC, as introduced in Figure D-II-2-1.

Table D-II-2-1: LCC Bi-directional IERs

IER TO	IE PRODUCT	USER SERVICE DEFINITION: OPERATIONAL CAPABILITY	TECHNICAL SERVICE LEVEL2	TECHNICAL SERVICE LEVEL 1
JFAC/AOC	TDL MESSAGES	SITUATIONAL AWARENESS	AIR COI SERVICE	COI SERVICES
JFAC/AOC	FAX	FAX	FAX	CORE SERVICES
JFAC/AOC	FORMAL MESSAGE	FORMAL MESSAGING	FORMAL MESSAGING SERVICE	CORE ENTERPRISE SERVICES
JFAC/AOC	INFORMAL MESSAGE	INFORMAL MESSAGING	INFORMAL MESSAGING	CORE SERVICES
JFAC/AOC	PORTAL SERVICES	PORTAL SERVICES	INFORMATION MANAGEMENT SERVICES	CORE ENTERPRISE SERVICES
JFAC/AOC	FULL MOTION VIDEO	FULL MOTION VIDEO	JISR COI SERVICE	COI SERVICES
JFAC/AOC	IMAGERY	INTEL DATABASE SERVICES	JISR COI SERVICE	COI SERVICES
JFAC/AOC	MOTION IMAGERY	INTEL DATABASE SERVICES	JISR COI SERVICE	COI SERVICES
JFAC/AOC	INSTANT MESSAGE	INSTANT MESSAGING	JOINT COI SERVICE	COI SERVICES
JFAC/AOC	TARGET INFORMATION (TST)	TIME SENSITIVE TARGETING	JOINT COI SERVICE	COI SERVICES
JFAC/AOC	OFFICE COLLABORATION (AUDIO)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
JFAC/AOC	OFFICE COLLABORATION (AV)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
JFAC/AOC	OFFICE COLLABORATION (CHAT)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
JFAC/AOC	OFFICE COLLABORATION (WHITEBOARD)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
JFAC/AOC	VOICE (NON-SECURE)	VOICE	VOICE	CORE SERVICES
JFAC/AOC	VOICE (SECURE)	VOICE	VOICE	CORE SERVICES
JFAC/AOC	VTC	VTC	VTC	CORE SERVICES
BDE	FAX	FAX	FAX	CORE SERVICES
BDE	FORMAL MESSAGE	FORMAL MESSAGING	FORMAL MESSAGING SERVICE	CORE ENTERPRISE SERVICES
BDE	INFORMAL MESSAGE	INFORMAL MESSAGING	INFORMAL MESSAGING	CORE SERVICES
BDE	IMAGERY	INTEL DATABASE SERVICES	JISR COI SERVICE	COI SERVICES
BDE	MOTION IMAGERY	INTEL DATABASE SERVICES	JISR COI SERVICE	COI SERVICES
BDE	BIOMETRIC INFO	REPORTS	JISR COI SERVICE	COI SERVICES
BDE	EW INFO	REPORTS	JISR COI SERVICE	COI SERVICES
BDE	HUMINT INFO	REPORTS	JISR COI SERVICE	COI SERVICES
BDE	INTREPS	REPORTS	JISR COI SERVICE	COI SERVICES
BDE	IR	REQUESTS AND RESPONSES	JISR COI SERVICE	COI SERVICES
BDE	ISRR	REQUESTS AND RESPONSES	JISR COI SERVICE	COI SERVICES
BDE	JISR COLLECTION INFO	REQUESTS AND RESPONSES	JISR COI SERVICE	COI SERVICES
BDE	RFI	REQUESTS AND RESPONSES	JISR COI SERVICE	COI SERVICES
BDE	INSTANT MESSAGE	INSTANT MESSAGING	JOINT COI SERVICE	COI SERVICES
BDE	ENSITREP	REPORTS	LAND COI SERVICE	COI SERVICES
BDE	MOVEMENTS AND TRANSPORTATION INFO	REPORTS	LOGISTICS COI SERVICE	COI SERVICES
BDE	SUPPLIES AND MATERIAL	RESOURCE STATUS	LOGISTICS COI SERVICE	COI SERVICES
BDE	OFFICE COLLABORATION (AUDIO)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
BDE	OFFICE COLLABORATION (AV)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
BDE	OFFICE COLLABORATION (CHAT)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
BDE	OFFICE COLLABORATION (WHITEBOARD)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
BDE	VOICE (NON-SECURE)	VOICE	VOICE	CORE SERVICES
BDE	VOICE (SECURE)	VOICE	VOICE	CORE SERVICES
CBRN	FAX	FAX	FAX	CORE SERVICES
CBRN	FORMAL MESSAGE	FORMAL MESSAGING	FORMAL MESSAGING SERVICE	CORE ENTERPRISE SERVICES
CBRN	INFORMAL MESSAGE	INFORMAL MESSAGING	INFORMAL MESSAGING	CORE SERVICES
CBRN	PORTAL SERVICES	PORTAL SERVICES	INFORMATION MANAGEMENT SERVICES	CORE ENTERPRISE SERVICES
CBRN	INSTANT MESSAGE	INSTANT MESSAGING	JOINT COI SERVICE	COI SERVICES
CBRN	OFFICE COLLABORATION (AUDIO)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
CBRN	OFFICE COLLABORATION (AV)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
CBRN	OFFICE COLLABORATION (CHAT)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
CBRN	OFFICE COLLABORATION (WHITEBOARD)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
CBRN	VOICE (NON-SECURE)	VOICE	VOICE	CORE SERVICES
CBRN	VOICE (SECURE)	VOICE	VOICE	CORE SERVICES
CBRN	VTC	VTC	VTC	CORE SERVICES
DARS	FAX	FAX	FAX	CORE SERVICES
DARS	INFORMAL MESSAGE	INFORMAL MESSAGING	INFORMAL MESSAGING	CORE SERVICES
DARS	VOICE (NON-SECURE)	VOICE	VOICE	CORE SERVICES
DARS	VOICE (SECURE)	VOICE	VOICE	CORE SERVICES

IER TO	IE PRODUCT	USER SERVICE DEFINITION: OPERATIONAL CAPABILITY	TECHNICAL SERVICE LEVEL2	TECHNICAL SERVICE LEVEL 1
DOB1/APOD	FAX	FAX	FAX	CORE SERVICES
DOB1/APOD	INFORMAL MESSAGE	INFORMAL MESSAGING	INFORMAL MESSAGING	CORE SERVICES
DOB1/APOD	VOICE (NON-SECURE)	VOICE	VOICE	CORE SERVICES
DOB1/APOD	VOICE (SECURE)	VOICE	VOICE	CORE SERVICES
HN/ GO/ NGO/ IO	FAX	FAX	FAX	CORE SERVICES
HN/ GO/ NGO/ IO	INFORMAL MESSAGE	INFORMAL MESSAGING	INFORMAL MESSAGING	CORE SERVICES
HN/ GO/ NGO/ IO	PORTAL SERVICES	PORTAL SERVICES	INFORMATION MANAGEMENT SERVICES	CORE ENTERPRISE SERVICES
HN/ GO/ NGO/ IO	VOICE (NON-SECURE)	VOICE	VOICE	CORE SERVICES
JHQ STATIC	FAX	FAX	FAX	CORE SERVICES
JHQ STATIC	FORMAL MESSAGE	FORMAL MESSAGING	FORMAL MESSAGING SERVICE	CORE ENTERPRISE SERVICES
JHQ STATIC	INFORMAL MESSAGE	INFORMAL MESSAGING	INFORMAL MESSAGING	CORE SERVICES
JHQ STATIC	PORTAL SERVICES	PORTAL SERVICES	INFORMATION MANAGEMENT SERVICES	CORE ENTERPRISE SERVICES
JHQ STATIC	VOICE (NON-SECURE)	VOICE	VOICE	CORE SERVICES
JHQ STATIC	VOICE (SECURE)	VOICE	VOICE	CORE SERVICES
JHQ STATIC	VTC	VTC	VTC	CORE SERVICES
JLSG	FAX	FAX	FAX	CORE SERVICES
JLSG	FORMAL MESSAGE	FORMAL MESSAGING	FORMAL MESSAGING SERVICE	CORE ENTERPRISE SERVICES
JLSG	INFORMAL MESSAGE	INFORMAL MESSAGING	INFORMAL MESSAGING	CORE SERVICES
JLSG	INSTANT MESSAGE	INSTANT MESSAGING	JOINT COI SERVICE	COI SERVICES
JLSG	MOVEMENTS AND TRANSPORTATION INFO	REPORTS	LOGISTICS COI SERVICE	COI SERVICES
JLSG	SUPPLIES AND MATERIAL	RESOURCE STATUS	LOGISTICS COI SERVICE	COI SERVICES
JLSG	VOICE (NON-SECURE)	VOICE	VOICE	CORE SERVICES
JLSG	VOICE (SECURE)	VOICE	VOICE	CORE SERVICES
JLSG	VTC	VTC	VTC	CORE SERVICES
JTF HQ	DIRECTORY SYNC	DIRECTORY SERVICES	DIRECTORY SERVICES	CORE SERVICES
JTF HQ	FAX	FAX	FAX	CORE SERVICES
JTF HQ	FORMAL MESSAGE	FORMAL MESSAGING	FORMAL MESSAGING SERVICE	CORE ENTERPRISE SERVICES
JTF HQ	INFORMAL MESSAGE	INFORMAL MESSAGING	INFORMAL MESSAGING	CORE SERVICES
JTF HQ	PORTAL SERVICES	PORTAL SERVICES	INFORMATION MANAGEMENT SERVICES	CORE ENTERPRISE SERVICES
JTF HQ	BICES INFO	BICES INFO	JISR COI SERVICE	COI SERVICES
JTF HQ	IMAGERY	INTEL DATABASE SERVICES	JISR COI SERVICE	COI SERVICES
JTF HQ	MOTION IMAGERY	INTEL DATABASE SERVICES	JISR COI SERVICE	COI SERVICES
JTF HQ	BIOMETRIC INFO	REPORTS	JISR COI SERVICE	COI SERVICES
JTF HQ	EW INFO	REPORTS	JISR COI SERVICE	COI SERVICES
JTF HQ	HUMINT INFO	REPORTS	JISR COI SERVICE	COI SERVICES
JTF HQ	INTREPS	REPORTS	JISR COI SERVICE	COI SERVICES
JTF HQ	IR	REQUESTS AND RESPONSES	JISR COI SERVICE	COI SERVICES
JTF HQ	ISRR	REQUESTS AND RESPONSES	JISR COI SERVICE	COI SERVICES
JTF HQ	JISR COLLECTION INFO	REQUESTS AND RESPONSES	JISR COI SERVICE	COI SERVICES
JTF HQ	RFI	REQUESTS AND RESPONSES	JISR COI SERVICE	COI SERVICES
JTF HQ	INSTANT MESSAGE	INSTANT MESSAGING	JOINT COI SERVICE	COI SERVICES
JTF HQ	JPITL	JOINT TARGETING	JOINT COI SERVICE	COI SERVICES
JTF HQ	NSL	JOINT TARGETING	JOINT COI SERVICE	COI SERVICES
JTF HQ	PTL	JOINT TARGETING	JOINT COI SERVICE	COI SERVICES
JTF HQ	TARGET FOLDER	JOINT TARGETING	JOINT COI SERVICE	COI SERVICES
JTF HQ	TNL	JOINT TARGETING	JOINT COI SERVICE	COI SERVICES
JTF HQ	OPLAN	PLANS	JOINT COI SERVICE	COI SERVICES
JTF HQ	INCREP	REPORTS	JOINT COI SERVICE	COI SERVICES
JTF HQ	FRAGO	TASKING & ORDERS	JOINT COI SERVICE	COI SERVICES
JTF HQ	JCO	TASKING & ORDERS	JOINT COI SERVICE	COI SERVICES
JTF HQ	TARGET INFORMATION (TST)	TIME SENSITIVE TARGETING	JOINT COI SERVICE	COI SERVICES
JTF HQ	FFT INFO	FFT	SITUATIONAL AWARENESS SERVICE	COI SERVICES
JTF HQ	OFFICE COLLABORATION (AUDIO)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
JTF HQ	OFFICE COLLABORATION (AV)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
JTF HQ	OFFICE COLLABORATION (CHAT)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
JTF HQ	OFFICE COLLABORATION (WHITEBOARD)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
JTF HQ	VOICE (NON-SECURE)	VOICE	VOICE	CORE SERVICES
JTF HQ	VOICE (SECURE)	VOICE	VOICE	CORE SERVICES
JTF HQ	VTC	VTC	VTC	CORE SERVICES

IER TO	IE PRODUCT	USER SERVICE DEFINITION: OPERATIONAL CAPABILITY	TECHNICAL SERVICE LEVEL2	TECHNICAL SERVICE LEVEL 1
MCC	FAX	FAX	FAX	CORE SERVICES
MCC	FORMAL MESSAGE	FORMAL MESSAGING	FORMAL MESSAGING SERVICE	CORE ENTERPRISE SERVICES
MCC	INFORMAL MESSAGE	INFORMAL MESSAGING	INFORMAL MESSAGING	CORE SERVICES
MCC	PORTAL SERVICES	PORTAL SERVICES	INFORMATION MANAGEMENT SERVICES	CORE ENTERPRISE SERVICES
MCC	IMAGERY	INTEL DATABASE SERVICES	JISR COI SERVICE	COI SERVICES
MCC	MOTION IMAGERY	INTEL DATABASE SERVICES	JISR COI SERVICE	COI SERVICES
MCC	INSTANT MESSAGE	INSTANT MESSAGING	JOINT COI SERVICE	COI SERVICES
MCC	TARGET FOLDER	JOINT TARGETING	JOINT COI SERVICE	COI SERVICES
MCC	OFFICE COLLABORATION (AUDIO)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
MCC	OFFICE COLLABORATION (AV)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
MCC	OFFICE COLLABORATION (CHAT)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
MCC	OFFICE COLLABORATION (WHITEBOARD)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
MCC	VOICE (NON-SECURE)	VOICE	VOICE	CORE SERVICES
MCC	VOICE (SECURE)	VOICE	VOICE	CORE SERVICES
MCC	VTC	VTC	VTC	CORE SERVICES
NAEW/DOB3	FAX	FAX	FAX	CORE SERVICES
NAEW/DOB3	FORMAL MESSAGE	FORMAL MESSAGING	FORMAL MESSAGING SERVICE	CORE ENTERPRISE SERVICES
NAEW/DOB3	INFORMAL MESSAGE	INFORMAL MESSAGING	INFORMAL MESSAGING	CORE SERVICES
NAEW/DOB3	INSTANT MESSAGE	INSTANT MESSAGING	JOINT COI SERVICE	COI SERVICES
NAEW/DOB3	VOICE (NON-SECURE)	VOICE	VOICE	CORE SERVICES
NAEW/DOB3	VOICE (SECURE)	VOICE	VOICE	CORE SERVICES
PODS/DOBS	FAX	FAX	FAX	CORE SERVICES
PODS/DOBS	FORMAL MESSAGE	FORMAL MESSAGING	FORMAL MESSAGING SERVICE	CORE ENTERPRISE SERVICES
PODS/DOBS	INFORMAL MESSAGE	INFORMAL MESSAGING	INFORMAL MESSAGING	CORE SERVICES
PODS/DOBS	INSTANT MESSAGE	INSTANT MESSAGING	JOINT COI SERVICE	COI SERVICES
PODS/DOBS	VOICE (NON-SECURE)	VOICE	VOICE	CORE SERVICES
PODS/DOBS	VOICE (SECURE)	VOICE	VOICE	CORE SERVICES
SOCC	FAX	FAX	FAX	CORE SERVICES
SOCC	FORMAL MESSAGE	FORMAL MESSAGING	FORMAL MESSAGING SERVICE	CORE ENTERPRISE SERVICES
SOCC	INFORMAL MESSAGE	INFORMAL MESSAGING	INFORMAL MESSAGING	CORE SERVICES
SOCC	PORTAL SERVICES	PORTAL SERVICES	INFORMATION MANAGEMENT SERVICES	CORE ENTERPRISE SERVICES
SOCC	IMAGERY	INTEL DATABASE SERVICES	JISR COI SERVICE	COI SERVICES
SOCC	MOTION IMAGERY	INTEL DATABASE SERVICES	JISR COI SERVICE	COI SERVICES
SOCC	INSTANT MESSAGE	INSTANT MESSAGING	JOINT COI SERVICE	COI SERVICES
SOCC	TARGET FOLDER	JOINT TARGETING	JOINT COI SERVICE	COI SERVICES
SOCC	OFFICE COLLABORATION (AUDIO)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
SOCC	OFFICE COLLABORATION (AV)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
SOCC	OFFICE COLLABORATION (CHAT)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
SOCC	OFFICE COLLABORATION (WHITEBOARD)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
SOCC	VOICE (NON-SECURE)	VOICE	VOICE	CORE SERVICES
SOCC	VOICE (SECURE)	VOICE	VOICE	CORE SERVICES
SOCC	VTC	VTC	VTC	CORE SERVICES

Table D-II-2-2: LCC Uni-directional Information Products Disseminated

IER TO	IE PRODUCT	USER SERVICE DEFINITION: OPERATIONAL CAPABILITY	TECHNICAL SERVICE LEVEL2	TECHNICAL SERVICE LEVEL 1
JFAC/AOC	ACMREQ	REQUESTS AND RESPONSES	AIR COI SERVICE	COI SERVICES
JFAC/AOC	AIRSUPREQ	REQUESTS AND RESPONSES	AIR COI SERVICE	COI SERVICES
JFAC/AOC	ORBAT	INTENT & GUIDANCE	JOINT COI SERVICE	COI SERVICES
JFAC/AOC	ENSITREP	REPORTS	LAND COI SERVICE	COI SERVICES
JFAC/AOC	OWNSITREP	REPORTS	LAND COI SERVICE	COI SERVICES
JFAC/AOC	RGP	SITUATIONAL AWARENESS	LAND COI SERVICE	COI SERVICES
JFAC/AOC	FFT INFO	FFT	SITUATIONAL AWARENESS SERVICE	COI SERVICES
BDE	METEO INFO	METEO	ENVIRONMENTAL COI SERVICE	COI SERVICES
BDE	CONTAMINATION REPORTS	NBC	ENVIRONMENTAL COI SERVICE	COI SERVICES
BDE	GEO INFORMATION	GEO SERVICES	GEOSPATIAL SERVICES	CORE ENTERPRISE SERVICES
BDE	PORTAL SERVICES	PORTAL SERVICES	INFORMATION MANAGEMENT SERVICES	CORE ENTERPRISE SERVICES
BDE	ORBAT	INTENT & GUIDANCE	JOINT COI SERVICE	COI SERVICES
BDE	COP	SITUATIONAL AWARENESS	JOINT COI SERVICE	COI SERVICES
BDE	RGP	SITUATIONAL AWARENESS	LAND COI SERVICE	COI SERVICES
CBRN	RGP	SITUATIONAL AWARENESS	LAND COI SERVICE	COI SERVICES
JLSG	LOGASSESSREP	REPORTS	LOGISTICS COI SERVICE	COI SERVICES
JTF HQ	FULL MOTION VIDEO	FULL MOTION VIDEO	JISR COI SERVICE	COI SERVICES
JTF HQ	ORBAT	INTENT & GUIDANCE	JOINT COI SERVICE	COI SERVICES
JTF HQ	JPTL	JOINT TARGETING	JOINT COI SERVICE	COI SERVICES
JTF HQ	CIS SITREP	REPORTS	JOINT NOC SERVICES	SMC
JTF HQ	ENSITREP	REPORTS	LAND COI SERVICE	COI SERVICES
JTF HQ	OWNSITREP	REPORTS	LAND COI SERVICE	COI SERVICES
JTF HQ	RGP	SITUATIONAL AWARENESS	LAND COI SERVICE	COI SERVICES
JTF HQ	MEDSITREP	MEDICAL	LOGISTICS COI SERVICE	COI SERVICES
NAEW/DOB3	PORTAL SERVICES	PORTAL SERVICES	INFORMATION MANAGEMENT SERVICES	CORE ENTERPRISE SERVICES
PODS/DOBS	PORTAL SERVICES	PORTAL SERVICES	INFORMATION MANAGEMENT SERVICES	CORE ENTERPRISE SERVICES

Table D-II-2-3: LCC Uni-directional Information Products Consumed

IER FROM	IE PRODUCT	USER SERVICE DEFINITION: OPERATIONAL CAPABILITY	TECHNICAL SERVICE LEVEL2	TECHNICAL SERVICE LEVEL 1
JFAC/AOC	AOD	INTENT & GUIDANCE	AIR COI SERVICE	COI SERVICES
JFAC/AOC	ACP	PLANS	AIR COI SERVICE	COI SERVICES
JFAC/AOC	RESPONSE	REQUESTS AND RESPONSES	AIR COI SERVICE	COI SERVICES
JFAC/AOC	RAP	SITUATIONAL AWARENESS	AIR COI SERVICE	COI SERVICES
JFAC/AOC	ACO	TASKING & ORDERS	AIR COI SERVICE	COI SERVICES
JFAC/AOC	ATO (ADATP3 F058)	TASKING & ORDERS	AIR COI SERVICE	COI SERVICES
JFAC/AOC	ATO (ADATP3 F068)	TASKING & ORDERS	AIR COI SERVICE	COI SERVICES
JFAC/AOC	OPTASKLINK	TASKING & ORDERS	AIR COI SERVICE	COI SERVICES
JFAC/AOC	TMD INFO	TMD INFO	MISSILE DEFENCE COI SERVICE	COI SERVICES
BDE	CIS SITREP	REPORTS	JOINT NOC SERVICES	SMC
BDE	MEDSITREP	MEDICAL	LOGISTICS COI SERVICE	COI SERVICES
BDE	LOGASSESSREP	REPORTS	LOGISTICS COI SERVICE	COI SERVICES
CBRN	CONTAMINATION REPORTS	NBC	ENVIRONMENTAL COI SERVICE	COI SERVICES
CBRN	ENVIRONMENTAL UPDATES	SITUATIONAL AWARENESS	ENVIRONMENTAL COI SERVICE	COI SERVICES
JHQ STATIC	METEO INFO	METEO	ENVIRONMENTAL COI SERVICE	COI SERVICES
JLSG	RLP	SITUATIONAL AWARENESS	LOGISTICS COI SERVICE	COI SERVICES
JTF HQ	METEO INFO	METEO	ENVIRONMENTAL COI SERVICE	COI SERVICES
JTF HQ	CONTAMINATION REPORTS	NBC	ENVIRONMENTAL COI SERVICE	COI SERVICES
JTF HQ	GEO INFORMATION	GEO SERVICES	GEOSPATIAL SERVICES	CORE ENTERPRISE SERVICES
JTF HQ	DOCUMENT COLLABORATION AND STORAGE	INFORMATION MGT	INFORMATION MANAGEMENT SERVICES	CORE ENTERPRISE SERVICES
JTF HQ	IMINT REP	REPORTS	JISR COI SERVICE	COI SERVICES
JTF HQ	INTSUM	REPORTS	JISR COI SERVICE	COI SERVICES
JTF HQ	COP	SITUATIONAL AWARENESS	JOINT COI SERVICE	COI SERVICES
JTF HQ	CIS PICTURE	SITUATIONAL AWARENESS	JOINT NOC SERVICES	SMC

D-II-3 Information Exchange Requirements MCC.

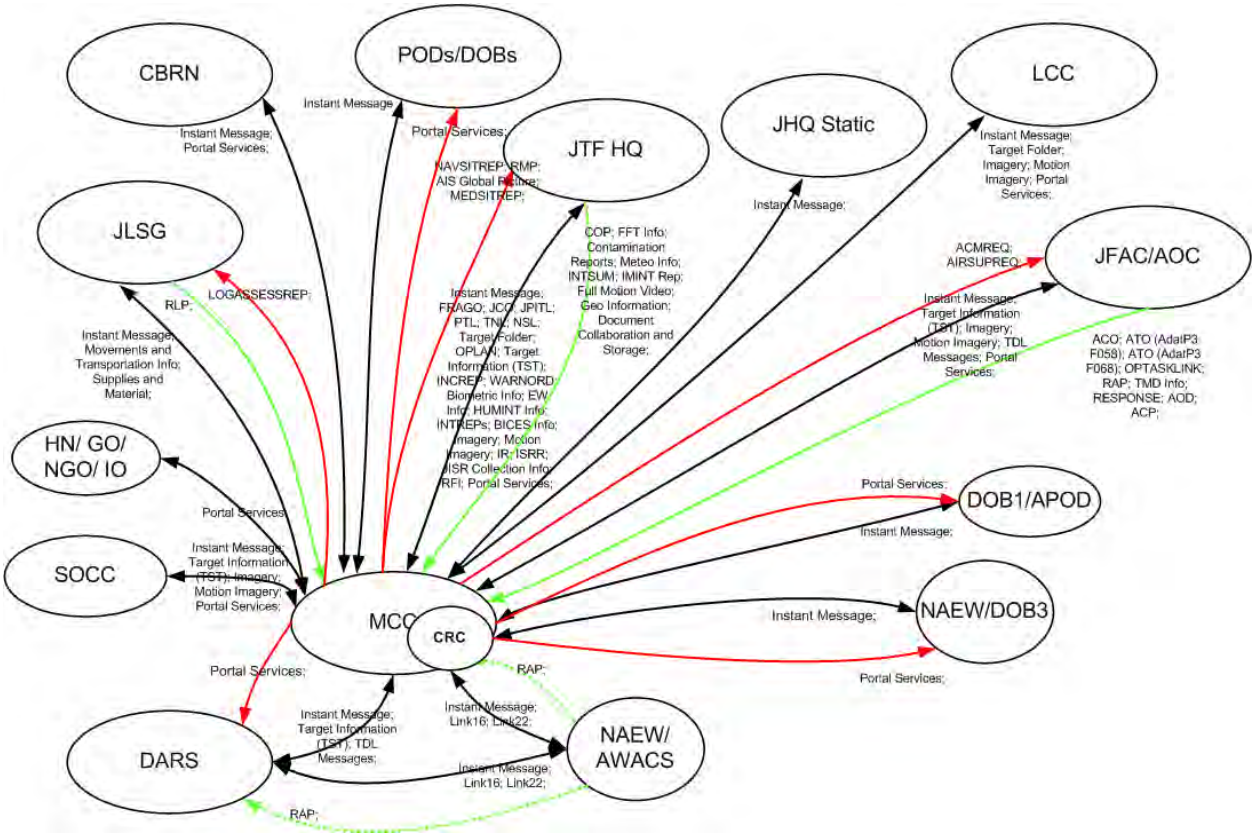

Figure D-II-3-1: C2 Information Product Exchange MCC

Specific C2 information product exchange for the MCC is depicted in Figure D-II-3-1. The bi-directional black arrow represents bi-directional exchange of information products, further detailed in Table D-II-3-1. The unidirectional red arrow shows information products sent from the MCC to other C2 entities, further detailed in Table D-II-3-2. Finally, the green unidirectional arrows represent information products send to and consumed by the MCC. These product exchanges are further detailed in Table D-II-3-3.

The bi-directional Information Exchange Requirements between the MCC and the other relevant C2 entities, as introduced in Figure D-1-1 and D-II-3-1 are depicted in Table D-II-3-1. The column “IERs To” lists the C2 entity the information products are exchanged with (in both directions), the second column lists the product that is exchanged. The operational capability the product supports is given in column 3, while columns 4 and 5 provide the technical services at Level 2 and Level 1.

The information products disseminated from the MCC to the other relevant C2 entities, as introduced in Figure D-II-3-1, are depicted in Table D-II-3-2.

Finally, Table D-II-3-3 contains the unidirectional information products consumed by the MCC, as introduced in Figure D-II-3-1.

Table D-II-3-1: MCC Bi-directional IERs

IER TO	IE PRODUCT	USER SERVICE DEFINITION: OPERATIONAL CAPABILITY	TECHNICAL SERVICE LEVEL2	TECHNICAL SERVICE LEVEL 1
JFAC/AOC	TDL MESSAGES	SITUATIONAL AWARENESS	AIR COI SERVICE	COI SERVICES
JFAC/AOC	FAX	FAX	FAX	CORE SERVICES
JFAC/AOC	FORMAL MESSAGE	FORMAL MESSAGING	FORMAL MESSAGING SERVICE	CORE ENTERPRISE SERVICES
JFAC/AOC	INFORMAL MESSAGE	INFORMAL MESSAGING	INFORMAL MESSAGING	CORE SERVICES
JFAC/AOC	PORTAL SERVICES	PORTAL SERVICES	INFORMATION MANAGEMENT SERVICES	CORE ENTERPRISE SERVICES
JFAC/AOC	IMAGERY	INTEL DATABASE SERVICES	JISR COI SERVICE	COI SERVICES
JFAC/AOC	MOTION IMAGERY	INTEL DATABASE SERVICES	JISR COI SERVICE	COI SERVICES
JFAC/AOC	INSTANT MESSAGE	INSTANT MESSAGING	JOINT COI SERVICE	COI SERVICES
JFAC/AOC	TARGET INFORMATION (TST)	TIME SENSITIVE TARGETING	JOINT COI SERVICE	COI SERVICES
JFAC/AOC	OFFICE COLLABORATION (AUDIO)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
JFAC/AOC	OFFICE COLLABORATION (AV)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
JFAC/AOC	OFFICE COLLABORATION (CHAT)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
JFAC/AOC	OFFICE COLLABORATION (WHITEBOARD)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
JFAC/AOC	VOICE (NON-SECURE)	VOICE	VOICE	CORE SERVICES
JFAC/AOC	VOICE (SECURE)	VOICE	VOICE	CORE SERVICES
JFAC/AOC	VTC	VTC	VTC	CORE SERVICES
CBRN	FAX	FAX	FAX	CORE SERVICES
CBRN	FORMAL MESSAGE	FORMAL MESSAGING	FORMAL MESSAGING SERVICE	CORE ENTERPRISE SERVICES
CBRN	INFORMAL MESSAGE	INFORMAL MESSAGING	INFORMAL MESSAGING	CORE SERVICES
CBRN	PORTAL SERVICES	PORTAL SERVICES	INFORMATION MANAGEMENT SERVICES	CORE ENTERPRISE SERVICES
CBRN	INSTANT MESSAGE	INSTANT MESSAGING	JOINT COI SERVICE	COI SERVICES
CBRN	OFFICE COLLABORATION (AUDIO)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
CBRN	OFFICE COLLABORATION (AV)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
CBRN	OFFICE COLLABORATION (CHAT)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
CBRN	OFFICE COLLABORATION (WHITEBOARD)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
CBRN	VOICE (NON-SECURE)	VOICE	VOICE	CORE SERVICES
CBRN	VOICE (SECURE)	VOICE	VOICE	CORE SERVICES
CBRN	VTC	VTC	VTC	CORE SERVICES
DARS	TDL MESSAGES	SITUATIONAL AWARENESS	AIR COI SERVICE	COI SERVICES
DARS	FAX	FAX	FAX	CORE SERVICES
DARS	FORMAL MESSAGE	FORMAL MESSAGING	FORMAL MESSAGING SERVICE	CORE ENTERPRISE SERVICES
DARS	INFORMAL MESSAGE	INFORMAL MESSAGING	INFORMAL MESSAGING	CORE SERVICES
DARS	INSTANT MESSAGE	INSTANT MESSAGING	JOINT COI SERVICE	COI SERVICES
DARS	TARGET INFORMATION (TST)	TIME SENSITIVE TARGETING	JOINT COI SERVICE	COI SERVICES
DARS	VOICE (NON-SECURE)	VOICE	VOICE	CORE SERVICES
DARS	VOICE (SECURE)	VOICE	VOICE	CORE SERVICES
DARS	VTC	VTC	VTC	CORE SERVICES
DOB1/APOD	FAX	FAX	FAX	CORE SERVICES
DOB1/APOD	FORMAL MESSAGE	FORMAL MESSAGING	FORMAL MESSAGING SERVICE	CORE ENTERPRISE SERVICES
DOB1/APOD	INFORMAL MESSAGE	INFORMAL MESSAGING	INFORMAL MESSAGING	CORE SERVICES
DOB1/APOD	INSTANT MESSAGE	INSTANT MESSAGING	JOINT COI SERVICE	COI SERVICES
DOB1/APOD	VOICE (NON-SECURE)	VOICE	VOICE	CORE SERVICES
DOB1/APOD	VOICE (SECURE)	VOICE	VOICE	CORE SERVICES
DOB1/APOD	VTC	VTC	VTC	CORE SERVICES
HN/ GO/ NGO/ IO	FAX	FAX	FAX	CORE SERVICES
HN/ GO/ NGO/ IO	INFORMAL MESSAGE	INFORMAL MESSAGING	INFORMAL MESSAGING	CORE SERVICES
HN/ GO/ NGO/ IO	PORTAL SERVICES	PORTAL SERVICES	INFORMATION MANAGEMENT SERVICES	CORE ENTERPRISE SERVICES
HN/ GO/ NGO/ IO	VOICE (NON-SECURE)	VOICE	VOICE	CORE SERVICES
JHQ STATIC	FAX	FAX	FAX	CORE SERVICES
JHQ STATIC	FORMAL MESSAGE	FORMAL MESSAGING	FORMAL MESSAGING SERVICE	CORE ENTERPRISE SERVICES
JHQ STATIC	INFORMAL MESSAGE	INFORMAL MESSAGING	INFORMAL MESSAGING	CORE SERVICES
JHQ STATIC	PORTAL SERVICES	PORTAL SERVICES	INFORMATION MANAGEMENT SERVICES	CORE ENTERPRISE SERVICES
JHQ STATIC	VOICE (NON-SECURE)	VOICE	VOICE	CORE SERVICES
JHQ STATIC	VOICE (SECURE)	VOICE	VOICE	CORE SERVICES
JHQ STATIC	VTC	VTC	VTC	CORE SERVICES

IER TO	IE PRODUCT	USER SERVICE DEFINITION: OPERATIONAL CAPABILITY	TECHNICAL SERVICE LEVEL2	TECHNICAL SERVICE LEVEL 1
JLSG	FAX	FAX	FAX	CORE SERVICES
JLSG	FORMAL MESSAGE	FORMAL MESSAGING	FORMAL MESSAGING SERVICE	CORE ENTERPRISE SERVICES
JLSG	INFORMAL MESSAGE	INFORMAL MESSAGING	INFORMAL MESSAGING	CORE SERVICES
JLSG	INSTANT MESSAGE	INSTANT MESSAGING	JOINT COI SERVICE	COI SERVICES
JLSG	MOVEMENTS AND TRANSPORTATION INFO	REPORTS	LOGISTICS COI SERVICE	COI SERVICES
JLSG	SUPPLIES AND MATERIAL	RESOURCE STATUS	LOGISTICS COI SERVICE	COI SERVICES
JLSG	VOICE (NON-SECURE)	VOICE	VOICE	CORE SERVICES
JLSG	VOICE (SECURE)	VOICE	VOICE	CORE SERVICES
JLSG	VTC	VTC	VTC	CORE SERVICES
JTF HQ	DIRECTORY SYNC	DIRECTORY SERVICES	DIRECTORY SERVICES	CORE SERVICES
JTF HQ	FAX	FAX	FAX	CORE SERVICES
JTF HQ	FORMAL MESSAGE	FORMAL MESSAGING	FORMAL MESSAGING SERVICE	CORE ENTERPRISE SERVICES
JTF HQ	INFORMAL MESSAGE	INFORMAL MESSAGING	INFORMAL MESSAGING	CORE SERVICES
JTF HQ	PORTAL SERVICES	PORTAL SERVICES	INFORMATION MANAGEMENT SERVICES	CORE ENTERPRISE SERVICES
JTF HQ	BICES INFO	BICES INFO	JISR COI SERVICE	COI SERVICES
JTF HQ	IMAGERY	INTEL DATABASE SERVICES	JISR COI SERVICE	COI SERVICES
JTF HQ	MOTION IMAGERY	INTEL DATABASE SERVICES	JISR COI SERVICE	COI SERVICES
JTF HQ	BIOMETRIC INFO	REPORTS	JISR COI SERVICE	COI SERVICES
JTF HQ	EW INFO	REPORTS	JISR COI SERVICE	COI SERVICES
JTF HQ	HUMINT INFO	REPORTS	JISR COI SERVICE	COI SERVICES
JTF HQ	INTREPS	REPORTS	JISR COI SERVICE	COI SERVICES
JTF HQ	IR	REQUESTS AND RESPONSES	JISR COI SERVICE	COI SERVICES
JTF HQ	ISRR	REQUESTS AND RESPONSES	JISR COI SERVICE	COI SERVICES
JTF HQ	JISR COLLECTION INFO	REQUESTS AND RESPONSES	JISR COI SERVICE	COI SERVICES
JTF HQ	RFI	REQUESTS AND RESPONSES	JISR COI SERVICE	COI SERVICES
JTF HQ	INSTANT MESSAGE	INSTANT MESSAGING	JOINT COI SERVICE	COI SERVICES
JTF HQ	JPITL	JOINT TARGETING	JOINT COI SERVICE	COI SERVICES
JTF HQ	NSL	JOINT TARGETING	JOINT COI SERVICE	COI SERVICES
JTF HQ	PTL	JOINT TARGETING	JOINT COI SERVICE	COI SERVICES
JTF HQ	TARGET FOLDER	JOINT TARGETING	JOINT COI SERVICE	COI SERVICES
JTF HQ	TNL	JOINT TARGETING	JOINT COI SERVICE	COI SERVICES
JTF HQ	OPLAN	PLANS	JOINT COI SERVICE	COI SERVICES
JTF HQ	INCREP	REPORTS	JOINT COI SERVICE	COI SERVICES
JTF HQ	FRAGO	TASKING & ORDERS	JOINT COI SERVICE	COI SERVICES
JTF HQ	JCO	TASKING & ORDERS	JOINT COI SERVICE	COI SERVICES
JTF HQ	TARGET INFORMATION (TST)	TIME SENSITIVE TARGETING	JOINT COI SERVICE	COI SERVICES
JTF HQ	OFFICE COLLABORATION (AUDIO)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
JTF HQ	OFFICE COLLABORATION (AV)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
JTF HQ	OFFICE COLLABORATION (CHAT)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
JTF HQ	OFFICE COLLABORATION (WHITEBOARD)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
JTF HQ	VOICE (NON-SECURE)	VOICE	VOICE	CORE SERVICES
JTF HQ	VOICE (SECURE)	VOICE	VOICE	CORE SERVICES
JTF HQ	VTC	VTC	VTC	CORE SERVICES
LCC	FAX	FAX	FAX	CORE SERVICES
LCC	FORMAL MESSAGE	FORMAL MESSAGING	FORMAL MESSAGING SERVICE	CORE ENTERPRISE SERVICES
LCC	INFORMAL MESSAGE	INFORMAL MESSAGING	INFORMAL MESSAGING	CORE SERVICES
LCC	PORTAL SERVICES	PORTAL SERVICES	INFORMATION MANAGEMENT SERVICES	CORE ENTERPRISE SERVICES
LCC	IMAGERY	INTEL DATABASE SERVICES	JISR COI SERVICE	COI SERVICES
LCC	MOTION IMAGERY	INTEL DATABASE SERVICES	JISR COI SERVICE	COI SERVICES
LCC	INSTANT MESSAGE	INSTANT MESSAGING	JOINT COI SERVICE	COI SERVICES
LCC	TARGET FOLDER	JOINT TARGETING	JOINT COI SERVICE	COI SERVICES
LCC	OFFICE COLLABORATION (AUDIO)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
LCC	OFFICE COLLABORATION (AV)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
LCC	OFFICE COLLABORATION (CHAT)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
LCC	OFFICE COLLABORATION (WHITEBOARD)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
LCC	VOICE (NON-SECURE)	VOICE	VOICE	CORE SERVICES
LCC	VOICE (SECURE)	VOICE	VOICE	CORE SERVICES
LCC	VTC	VTC	VTC	CORE SERVICES

IER TO	IE PRODUCT	USER SERVICE DEFINITION: OPERATIONAL CAPABILITY	TECHNICAL SERVICE LEVEL2	TECHNICAL SERVICE LEVEL 1
NAEW/DOB3	FAX	FAX	FAX	CORE SERVICES
NAEW/DOB3	FORMAL MESSAGE	FORMAL MESSAGING	FORMAL MESSAGING SERVICE	CORE ENTERPRISE SERVICES
NAEW/DOB3	INFORMAL MESSAGE	INFORMAL MESSAGING	INFORMAL MESSAGING	CORE SERVICES
NAEW/DOB3	INSTANT MESSAGE	INSTANT MESSAGING	JOINT COI SERVICE	COI SERVICES
NAEW/DOB3	VOICE (NON-SECURE)	VOICE	VOICE	CORE SERVICES
NAEW/DOB3	VOICE (SECURE)	VOICE	VOICE	CORE SERVICES
NAEW/DOB3	VTC	VTC	VTC	CORE SERVICES
PODS/DOBS	FAX	FAX	FAX	CORE SERVICES
PODS/DOBS	FORMAL MESSAGE	FORMAL MESSAGING	FORMAL MESSAGING SERVICE	CORE ENTERPRISE SERVICES
PODS/DOBS	INFORMAL MESSAGE	INFORMAL MESSAGING	INFORMAL MESSAGING	CORE SERVICES
PODS/DOBS	INSTANT MESSAGE	INSTANT MESSAGING	JOINT COI SERVICE	COI SERVICES
PODS/DOBS	VOICE (NON-SECURE)	VOICE	VOICE	CORE SERVICES
PODS/DOBS	VOICE (SECURE)	VOICE	VOICE	CORE SERVICES
PODS/DOBS	VTC	VTC	VTC	CORE SERVICES
SOCC	FAX	FAX	FAX	CORE SERVICES
SOCC	FORMAL MESSAGE	FORMAL MESSAGING	FORMAL MESSAGING SERVICE	CORE ENTERPRISE SERVICES
SOCC	INFORMAL MESSAGE	INFORMAL MESSAGING	INFORMAL MESSAGING	CORE SERVICES
SOCC	PORTAL SERVICES	PORTAL SERVICES	INFORMATION MANAGEMENT SERVICES	CORE ENTERPRISE SERVICES
SOCC	IMAGERY	INTEL DATABASE SERVICES	JISR COI SERVICE	COI SERVICES
SOCC	MOTION IMAGERY	INTEL DATABASE SERVICES	JISR COI SERVICE	COI SERVICES
SOCC	INSTANT MESSAGE	INSTANT MESSAGING	JOINT COI SERVICE	COI SERVICES
SOCC	TARGET INFORMATION (TST)	TIME SENSITIVE TARGETING	JOINT COI SERVICE	COI SERVICES
SOCC	OFFICE COLLABORATION (AUDIO)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
SOCC	OFFICE COLLABORATION (AV)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
SOCC	OFFICE COLLABORATION (CHAT)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
SOCC	OFFICE COLLABORATION (WHITEBOARD)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
SOCC	VOICE (NON-SECURE)	VOICE	VOICE	CORE SERVICES
SOCC	VOICE (SECURE)	VOICE	VOICE	CORE SERVICES
SOCC	VTC	VTC	VTC	CORE SERVICES

Table D-II-3-2: MCC Uni-directional Information Products Disseminated

IER TO	IE PRODUCT	USER SERVICE DEFINITION: OPERATIONAL CAPABILITY	TECHNICAL SERVICE LEVEL2	TECHNICAL SERVICE LEVEL 1
JFAC/AOC	ACMREQ	REQUESTS AND RESPONSES	AIR COI SERVICE	COI SERVICES
JFAC/AOC	AIRSUPREQ	REQUESTS AND RESPONSES	AIR COI SERVICE	COI SERVICES
DARS	PORTAL SERVICES	PORTAL SERVICES	INFORMATION MANAGEMENT SERVICES	CORE ENTERPRISE SERVICES
DOB1/APOD	PORTAL SERVICES	PORTAL SERVICES	INFORMATION MANAGEMENT SERVICES	CORE ENTERPRISE SERVICES
JLSG	LOGASSESSREP	REPORTS	LOGISTICS COI SERVICE	COI SERVICES
JTF HQ	CIS SITREP	REPORTS	JOINT NOC SERVICES	SMC
JTF HQ	MEDSITREP	MEDICAL	LOGISTICS COI SERVICE	COI SERVICES
JTF HQ	NAVSITREP	REPORTS	MARITIME COI SERVICE	COI SERVICES
JTF HQ	AIS GLOBAL PICTURE	SITUATIONAL AWARENESS	MARITIME COI SERVICE	COI SERVICES
JTF HQ	RMP	SITUATIONAL AWARENESS	MARITIME COI SERVICE	COI SERVICES
NAEW/DOB3	PORTAL SERVICES	PORTAL SERVICES	INFORMATION MANAGEMENT SERVICES	CORE ENTERPRISE SERVICES
PODS/DOBS	PORTAL SERVICES	PORTAL SERVICES	INFORMATION MANAGEMENT SERVICES	CORE ENTERPRISE SERVICES

Table D-II-3-3: MCC Uni-directional Information Products Consumed

IER FROM	IE PRODUCT	USER SERVICE DEFINITION: OPERATIONAL CAPABILITY	TECHNICAL SERVICE LEVEL2	TECHNICAL SERVICE LEVEL 1
JFAC/AOC	AOD	INTENT & GUIDANCE	AIR COI SERVICE	COI SERVICES
JFAC/AOC	ACP	PLANS	AIR COI SERVICE	COI SERVICES
JFAC/AOC	RESPONSE	REQUESTS AND RESPONSES	AIR COI SERVICE	COI SERVICES
JFAC/AOC	RAP	SITUATIONAL AWARENESS	AIR COI SERVICE	COI SERVICES
JFAC/AOC	ACO	TASKING & ORDERS	AIR COI SERVICE	COI SERVICES
JFAC/AOC	ATO (ADATP3 F058)	TASKING & ORDERS	AIR COI SERVICE	COI SERVICES
JFAC/AOC	ATO (ADATP3 F068)	TASKING & ORDERS	AIR COI SERVICE	COI SERVICES
JFAC/AOC	OPTASKLINK	TASKING & ORDERS	AIR COI SERVICE	COI SERVICES
JFAC/AOC	TMD INFO	TMD INFO	MISSILE DEFENCE COI SERVICE	COI SERVICES
AWACS	RAP	SITUATIONAL AWARENESS	AIR COI SERVICE	COI SERVICES
JLSG	RLP	SITUATIONAL AWARENESS	LOGISTICS COI SERVICE	COI SERVICES
JTF HQ	METEO INFO	METEO	ENVIRONMENTAL COI SERVICE	COI SERVICES
JTF HQ	CONTAMINATION REPORTS	NBC	ENVIRONMENTAL COI SERVICE	COI SERVICES
JTF HQ	GEO INFORMATION	GEO SERVICES	GEOSPATIAL SERVICES	CORE ENTERPRISE SERVICES
JTF HQ	DOCUMENT COLLABORATION & STORAGE	INFORMATION MGT	INFORMATION MANAGEMENT SERVICES	CORE ENTERPRISE SERVICES
JTF HQ	FULL MOTION VIDEO	FULL MOTION VIDEO	JISR COI SERVICE	COI SERVICES
JTF HQ	IMINT REP	REPORTS	JISR COI SERVICE	COI SERVICES
JTF HQ	INTSUM	REPORTS	JISR COI SERVICE	COI SERVICES
JTF HQ	COP	SITUATIONAL AWARENESS	JOINT COI SERVICE	COI SERVICES
JTF HQ	CIS PICTURE	SITUATIONAL AWARENESS	JOINT NOC SERVICES	SMC
JTF HQ	FFT INFO	FFT	SITUATIONAL AWARENESS SERVICE	COI SERVICES

D-II-4 Information Exchange Requirements ACC/JFAC.

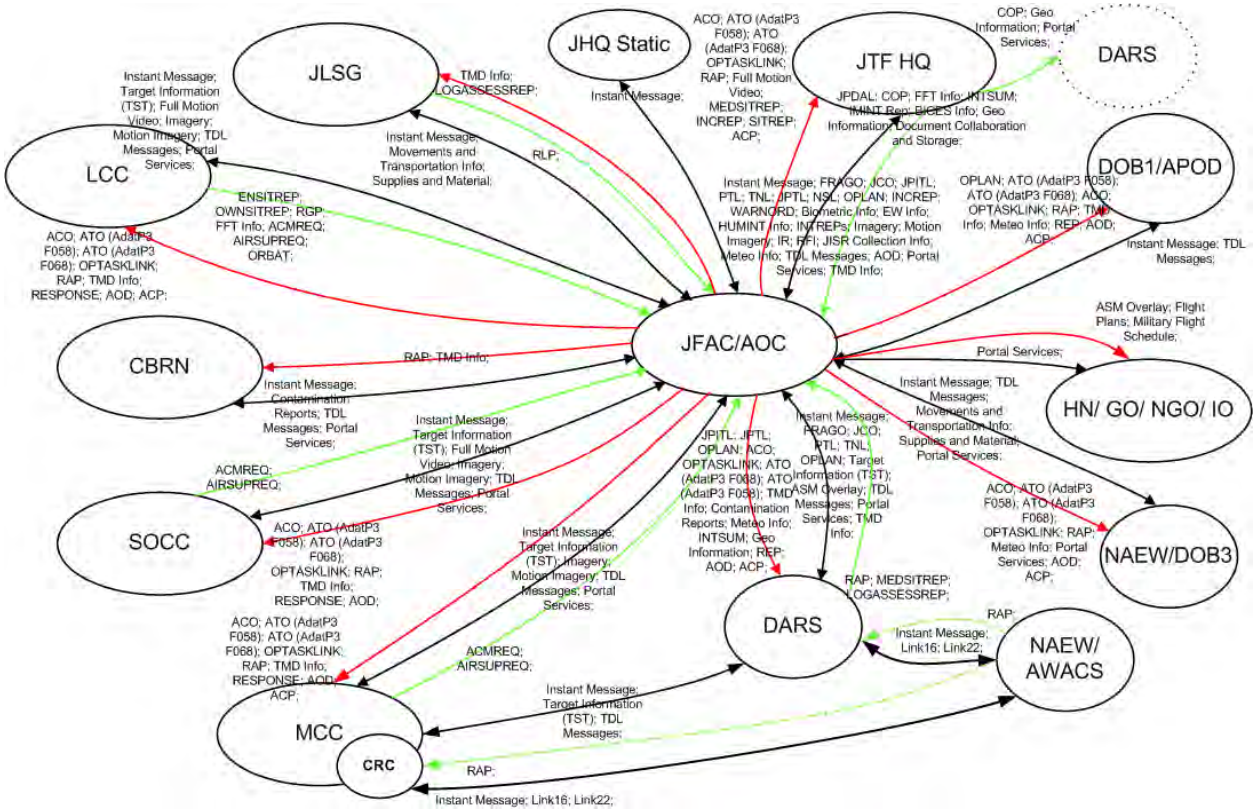

Figure D-II-4-1: C2 Information Product Exchange: JFAC/AOC

Specific C2 information product exchange for the JFAC/AOC is depicted in Figure D-II-4-1. The bi-directional black arrow represents bi-directional exchange of information products, further detailed in Table D-II-4-1. The unidirectional red arrow shows information products sent from the JFAC FWD to other C2 entities, further detailed in Table D-II-4-2. Finally, the green unidirectional arrows represent information products send to and consumed by the JFAC FWD. These product exchanges are further detailed in Table D-II-4-3.

The bi-directional Information Exchange Requirements between the JFAC/AOC and the other relevant C2 entities, as introduced in Figure D-1-1 and D-II-4-1 are depicted in Table D-II-4-1. The column “IERs To” lists the C2 entity the information products are exchanged with (in both directions), the second column lists the product that is exchanged. The operational capability the product supports is given in column 3, while columns 4 and 5 provide the technical services at Level 2 and Level 1.

The information products disseminated from the JFAC/AOC to the other relevant C2 entities, as introduced in Figure D-II-4-1, are depicted in Table D-II-4-2.

Finally, Table D-II-4-3 contains the unidirectional information products consumed by the JFAC/AOC, as introduced in Figure D-II-4-1.

Table D-II-4-1: JFAC/AOC Bi-directional IERs

IER TO	IE PRODUCT	USER SERVICE DEFINITION: OPERATIONAL CAPABILITY	TECHNICAL SERVICE LEVEL2	TECHNICAL SERVICE LEVEL 1
AWACS	INSTANT MESSAGE	INSTANT MESSAGING	JOINT COI SERVICE	COI SERVICES
AWACS	VOICE (NON-SECURE)	VOICE	VOICE	CORE SERVICES
AWACS	VOICE (SECURE)	VOICE	VOICE	CORE SERVICES
BDE	FAX	FAX	FAX	CORE SERVICES
BDE	INFORMAL MESSAGE	INFORMAL MESSAGING	INFORMAL MESSAGING	CORE SERVICES
BDE	PORTAL SERVICES	PORTAL SERVICES	INFORMATION MANAGEMENT SERVICES	CORE ENTERPRISE SERVICES
BDE	VOICE (NON-SECURE)	VOICE	VOICE	CORE SERVICES
CBRN	TDL MESSAGES	SITUATIONAL AWARENESS	AIR COI SERVICE	COI SERVICES
CBRN	CONTAMINATION REPORTS	NBC	ENVIRONMENTAL COI SERVICE	COI SERVICES
CBRN	FAX	FAX	FAX	CORE SERVICES
CBRN	FORMAL MESSAGE	FORMAL MESSAGING	FORMAL MESSAGING SERVICE	CORE ENTERPRISE SERVICES
CBRN	INFORMAL MESSAGE	INFORMAL MESSAGING	INFORMAL MESSAGING	CORE SERVICES
CBRN	PORTAL SERVICES	PORTAL SERVICES	INFORMATION MANAGEMENT SERVICES	CORE ENTERPRISE SERVICES
CBRN	INSTANT MESSAGE	INSTANT MESSAGING	JOINT COI SERVICE	COI SERVICES
CBRN	OFFICE COLLABORATION (AUDIO)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
CBRN	OFFICE COLLABORATION (AV)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
CBRN	OFFICE COLLABORATION (CHAT)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
CBRN	OFFICE COLLABORATION (WHITEBOARD)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
CBRN	VOICE (NON-SECURE)	VOICE	VOICE	CORE SERVICES
CBRN	VOICE (SECURE)	VOICE	VOICE	CORE SERVICES
CBRN	VTC	VTC	VTC	CORE SERVICES
DARS	ASM OVERLAY	SITUATIONAL AWARENESS	AIR COI SERVICE	COI SERVICES
DARS	TDL MESSAGES	SITUATIONAL AWARENESS	AIR COI SERVICE	COI SERVICES
DARS	DIRECTORY SYNC	DIRECTORY SERVICES	DIRECTORY SERVICES	CORE SERVICES
DARS	FAX	FAX	FAX	CORE SERVICES
DARS	FORMAL MESSAGE	FORMAL MESSAGING	FORMAL MESSAGING SERVICE	CORE ENTERPRISE SERVICES
DARS	INFORMAL MESSAGE	INFORMAL MESSAGING	INFORMAL MESSAGING	CORE SERVICES
DARS	PORTAL SERVICES	PORTAL SERVICES	INFORMATION MANAGEMENT SERVICES	CORE ENTERPRISE SERVICES
DARS	INSTANT MESSAGE	INSTANT MESSAGING	JOINT COI SERVICE	COI SERVICES
DARS	PTL	JOINT TARGETING	JOINT COI SERVICE	COI SERVICES
DARS	TNL	JOINT TARGETING	JOINT COI SERVICE	COI SERVICES
DARS	OPLAN	PLANS	JOINT COI SERVICE	COI SERVICES
DARS	FRAGO	TASKING & ORDERS	JOINT COI SERVICE	COI SERVICES
DARS	JCO	TASKING & ORDERS	JOINT COI SERVICE	COI SERVICES
DARS	TARGET INFORMATION (TST)	TIME SENSITIVE TARGETING	JOINT COI SERVICE	COI SERVICES
DARS	TMD INFO	TMD INFO	MISSILE DEFENCE COI SERVICE	COI SERVICES
DARS	OFFICE COLLABORATION (AUDIO)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
DARS	OFFICE COLLABORATION (AV)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
DARS	OFFICE COLLABORATION (CHAT)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
DARS	OFFICE COLLABORATION (WHITEBOARD)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
DARS	VOICE (NON-SECURE)	VOICE	VOICE	CORE SERVICES
DARS	VOICE (SECURE)	VOICE	VOICE	CORE SERVICES
DARS	VTC	VTC	VTC	CORE SERVICES
DOB1/APOD	TDL MESSAGES	SITUATIONAL AWARENESS	AIR COI SERVICE	COI SERVICES
DOB1/APOD	FAX	FAX	FAX	CORE SERVICES
DOB1/APOD	FORMAL MESSAGE	FORMAL MESSAGING	FORMAL MESSAGING SERVICE	CORE ENTERPRISE SERVICES
DOB1/APOD	INFORMAL MESSAGE	INFORMAL MESSAGING	INFORMAL MESSAGING	CORE SERVICES
DOB1/APOD	INSTANT MESSAGE	INSTANT MESSAGING	JOINT COI SERVICE	COI SERVICES
DOB1/APOD	OFFICE COLLABORATION (AUDIO)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
DOB1/APOD	OFFICE COLLABORATION (AV)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
DOB1/APOD	OFFICE COLLABORATION (CHAT)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
DOB1/APOD	OFFICE COLLABORATION (WHITEBOARD)	COLLABORATION	UNIFIED COMM. & COLLAB SERVICES	CORE ENTERPRISE SERVICES
DOB1/APOD	VOICE (NON-SECURE)	VOICE	VOICE	CORE SERVICES
DOB1/APOD	VOICE (SECURE)	VOICE	VOICE	CORE SERVICES
DOB1/APOD	VTC	VTC	VTC	CORE SERVICES
HN/ GO/ NGO/ IO	FAX	FAX	FAX	CORE SERVICES