



info-RAC

**UNITED NATIONS ENVIRONMENT PROGRAMME
MEDITERRANEAN ACTION PLAN**

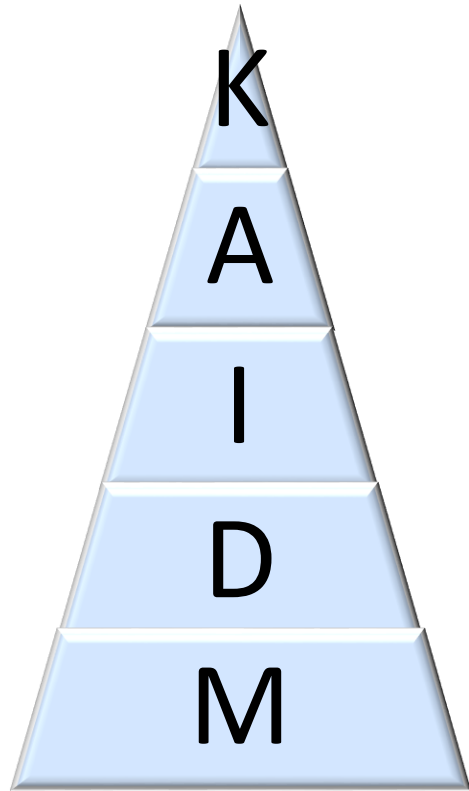
Meeting INFO-RAC/EEA

Copenhagen, 19th– 20th April 2017

EcAp Data Model

Progress and development of InfoMAP platform

Types of Data and workflow



- Knowledge: QSR, measures to be adopted. **2017 QSR is being developed by UNEP/MAP with RACs and supervision of CPs. To be approved by next COP.**
- Assessment: threshold values, good or not good, spatial and temporal scales. **Past and future WS in the context of SPI.**
- Indicator: implementation rules, aggregation and elaboration of data, index specification, representation of outputs. **Qualitative description on IMAP guidance. Technical work to be started.**
- Data: monitoring data information standards (data dictionaries, formats, rules, constraints, relations). **Work is on-going on INFO-RAC proposal**
- Monitoring: methodologies, protocols, planning strategies. **By 2018 CPs Monitoring programme to be started. For EU MS this corresponds to II cycle (2018-2024) based on I cycle (2012-2018)**

Monitoring – Data – Information – Assessment - Knowledge

Data: define information standards

- **First proposal from INFO-RAC for some monitoring data, comparison with other RACs and CPs strongly needed.** Work is on-going.
- **Information standards available on INFO-MAP for the CPs**
- **Services on INFO-MAP for the collection of monitoring data compliant with information standards**
 - DB tools
 - Web services
 - Excel files
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- **Indicators implementation:** aggregation, index calculation, representation
- **Assessment:** TBA

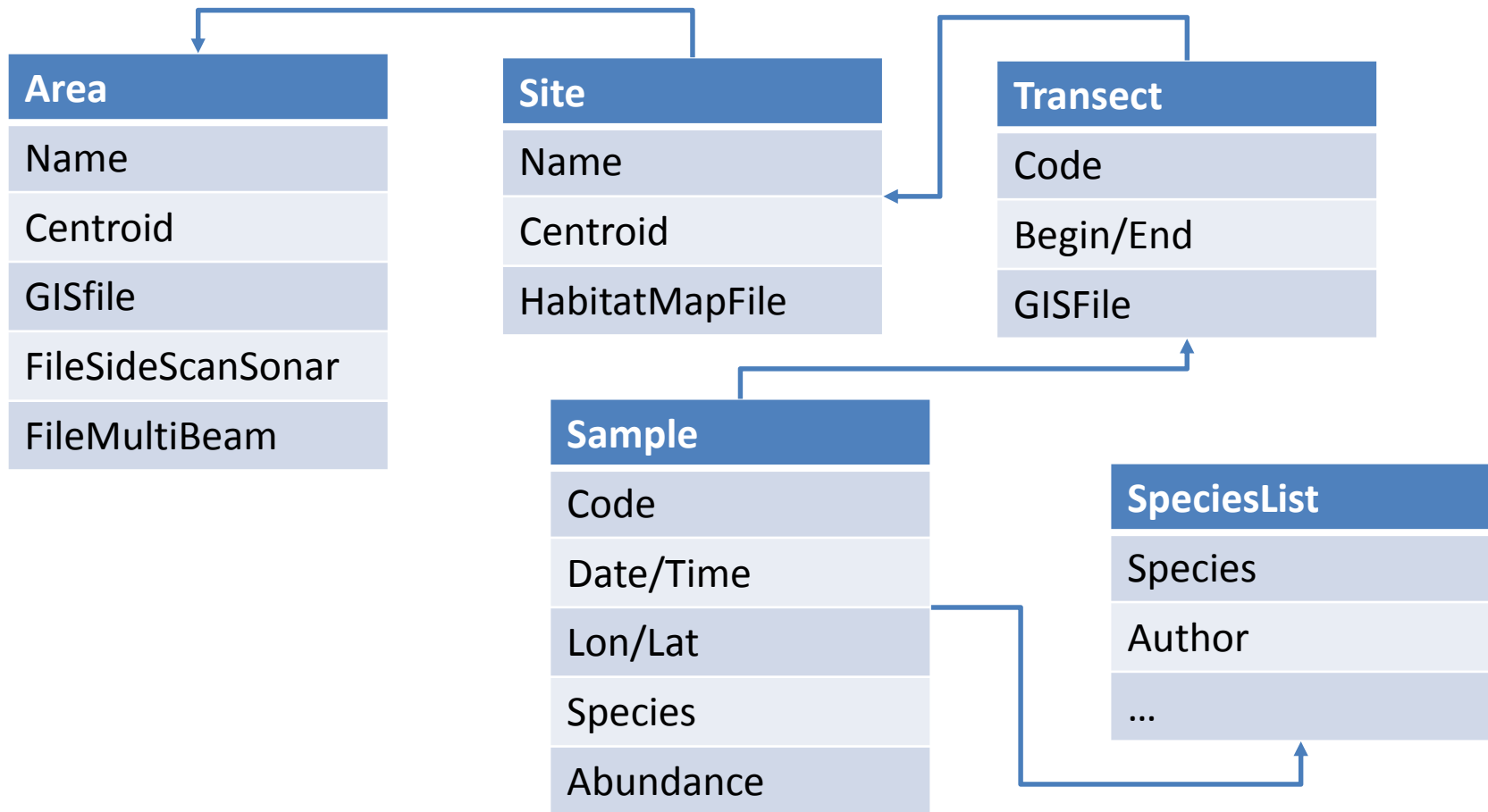
Information standards proposal for EcAP monitoring (1)

Ecological Objective	EcAp Common Indicator	INFO-MAP Information Standard
EO1 - Biodiversity	Common Indicator 1: Habitat distributional range (EO1);	Module 1 – Phytoplankton, Meso-zooplankton, Macro-zooplankton
	Common Indicator 2: Condition of the habitat’s typical species and communities (EO1);	Module 7 – Coralligenous Module 8 – Maerl Module 9 – Seabed habitat
	Common Indicator 3: Species distributional range (EO1 related to marine mammals, seabirds, marine reptiles);	
	Common Indicator 4: Population abundance of selected species (EO1, related to marine mammals, seabirds, marine reptiles);	
	Common indicator 5: Population demographic characteristics (EO1, e.g. body size or age class structure, sex ratio, fecundity rates, survival/mortality rates related to marine mammals, seabirds, marine reptiles)	
EO2 – Non-indigenous Species	Common Indicator 6: Trends in abundance, temporal occurrence, and spatial distribution of non-indigenous species, particularly invasive, non-indigenous species, notably in risk areas (EO2, in relation to the main vectors and pathways of spreading of such species);	Module 3 – Non-indigenous species (Phytoplankton, Meso-zooplankton)
EO5 – Eutrophication	Common Indicator 13: Concentration of key nutrients in water column (EO5);	Module 1E – Nutrients and physical and chemical parameters Module 6A – Aquaculture Modulo 6F – Riverine input Modulo 6U – UWWTD
	Common Indicator 14: Chlorophyll-a concentration in water column (EO5)	

Ecological Objective	EcAp Common Indicator	INFO-MAP Information Standard
EO9 – Contaminants	Common Indicator 17: Concentration of key harmful contaminants measured in the relevant matrix (EO9, related to biota, sediment, seawater);	Module 1 – Contaminants in seawater Module 5T/I – Contaminants in sediments/biota from industrial plants and maritime traffic
	Common Indicator 18: Level of pollution effects of key contaminants where a cause and effect relationship has been established (EO9);	
	Common Indicator 19: Occurrence, origin (where possible), extent of acute pollution events (e.g. slicks from oil, oil products and hazardous substances), and their impact on biota affected by this pollution (EO9);	
	Common Indicator 20: Actual levels of contaminants that have been detected and number of contaminants which have exceeded maximum regulatory levels in commonly consumed seafood (EO9);	
	Common Indicator 21: Percentage of intestinal enterococci concentration measurements within established standards (EO9)	

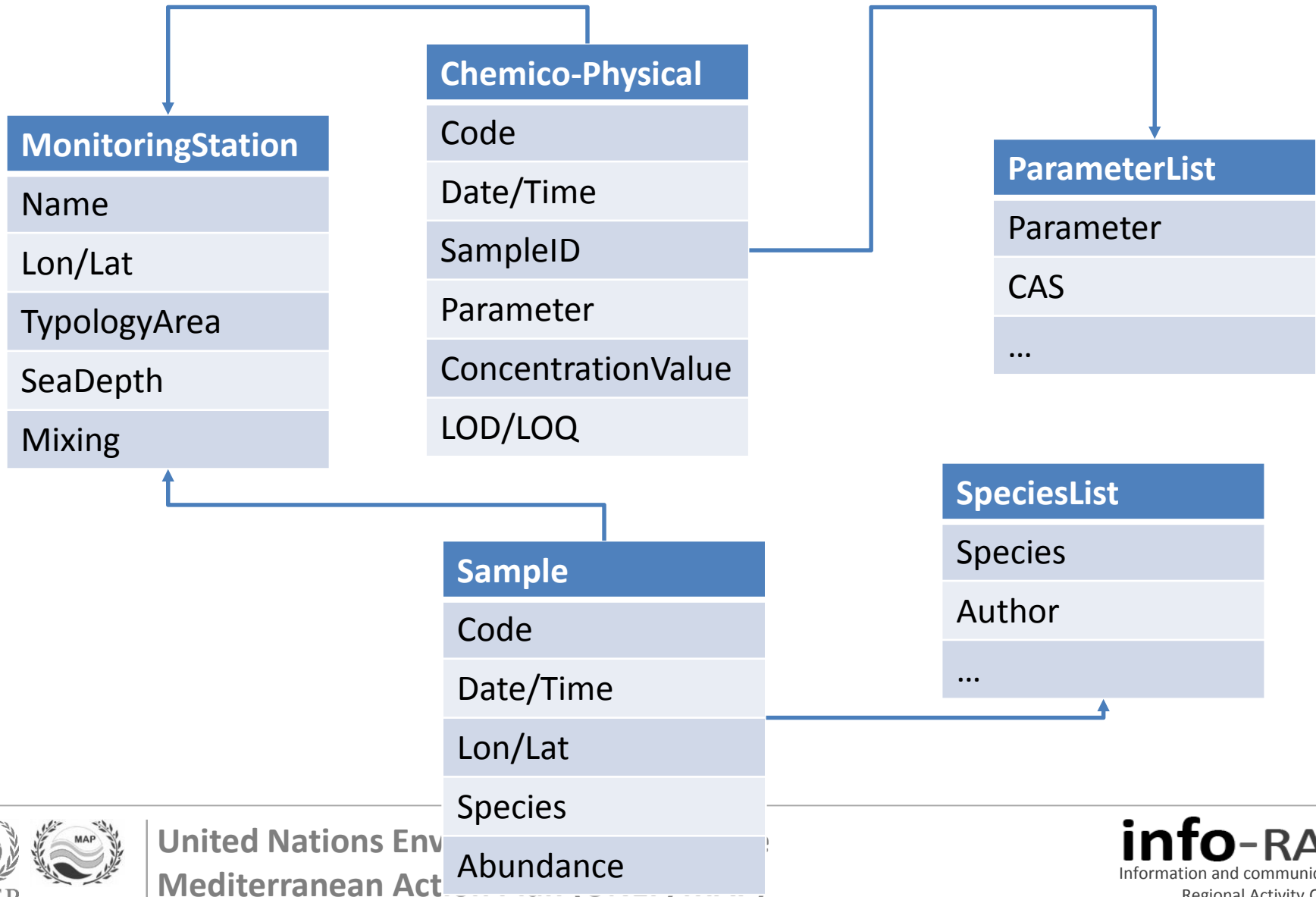
Ecological Objective	EcAp Common Indicator	INFO-MAP Information Standard
EO10 – Marine Litter	Common Indicator 22: Trends in the amount of litter washed ashore and/or deposited on coastlines (EO10);	Module 4 – Beach litter
	Common Indicator 23: Trends in the amount of litter in the water column including microplastics and on the seafloor (EO10);	Module 2 – Micro-plastics
	<u>Candidate</u> Indicator 24: Trends in the amount of litter ingested by or entangling marine organisms focusing on selected mammals, marine birds, and marine turtles (EO10)	
EO7 – Hydrography	Common Indicator 15: Location and extent of the habitats impacted directly by hydrographic alterations (EO7)	
EO8 – Coastal ecosystems and landscape	Common Indicator 16: Length of coastline subject to physical disturbance due to the influence of man-made structures (EO8);	Shapefile format from EcAp-ICZM project
	<u>Candidate</u> Indicator 25: Land use change (EO8)	
EO11 – Noise	<u>Candidate</u> Indicator 26: Proportion of days and geographical distribution where loud, low, and mid-frequency impulsive sounds exceed levels that are likely to entail significant impact on marine animals	
	<u>Candidate</u> Indicator 27: Levels of continuous low frequency sounds with the use of models as appropriate	

EO1: example for Habitat distributional range

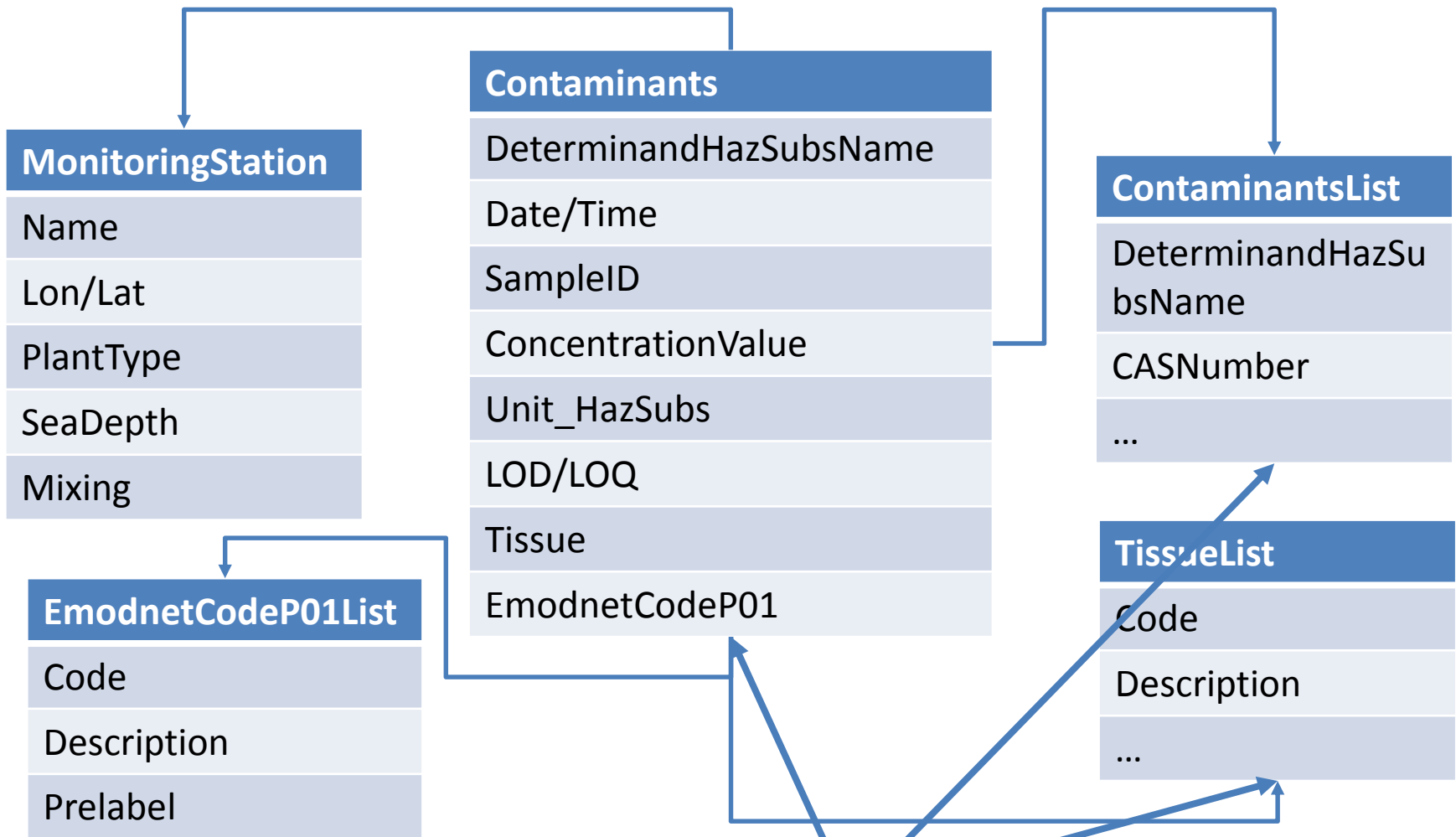


Information standards examples (2)

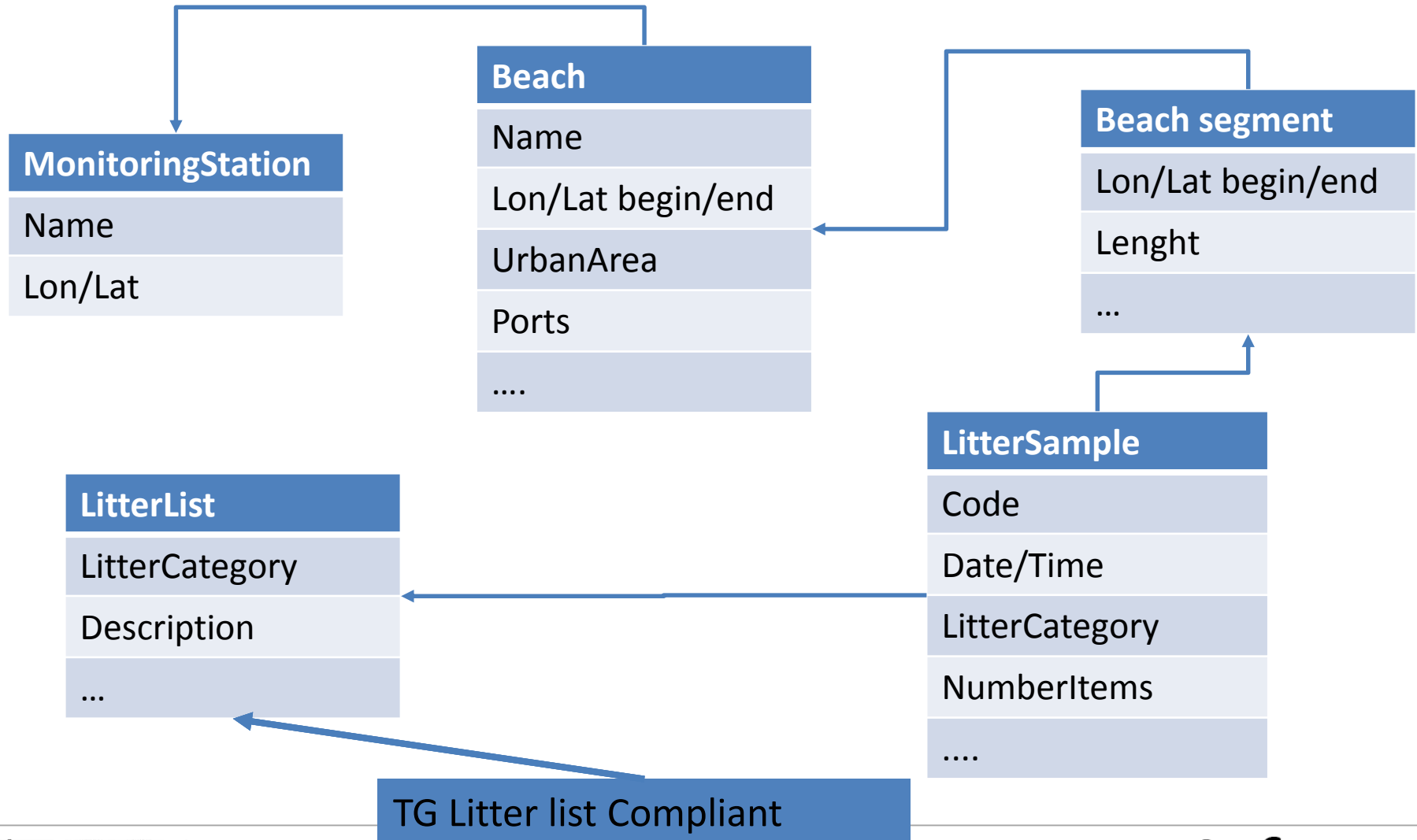
EO2: Abundance/Temporal occurrence of NIS



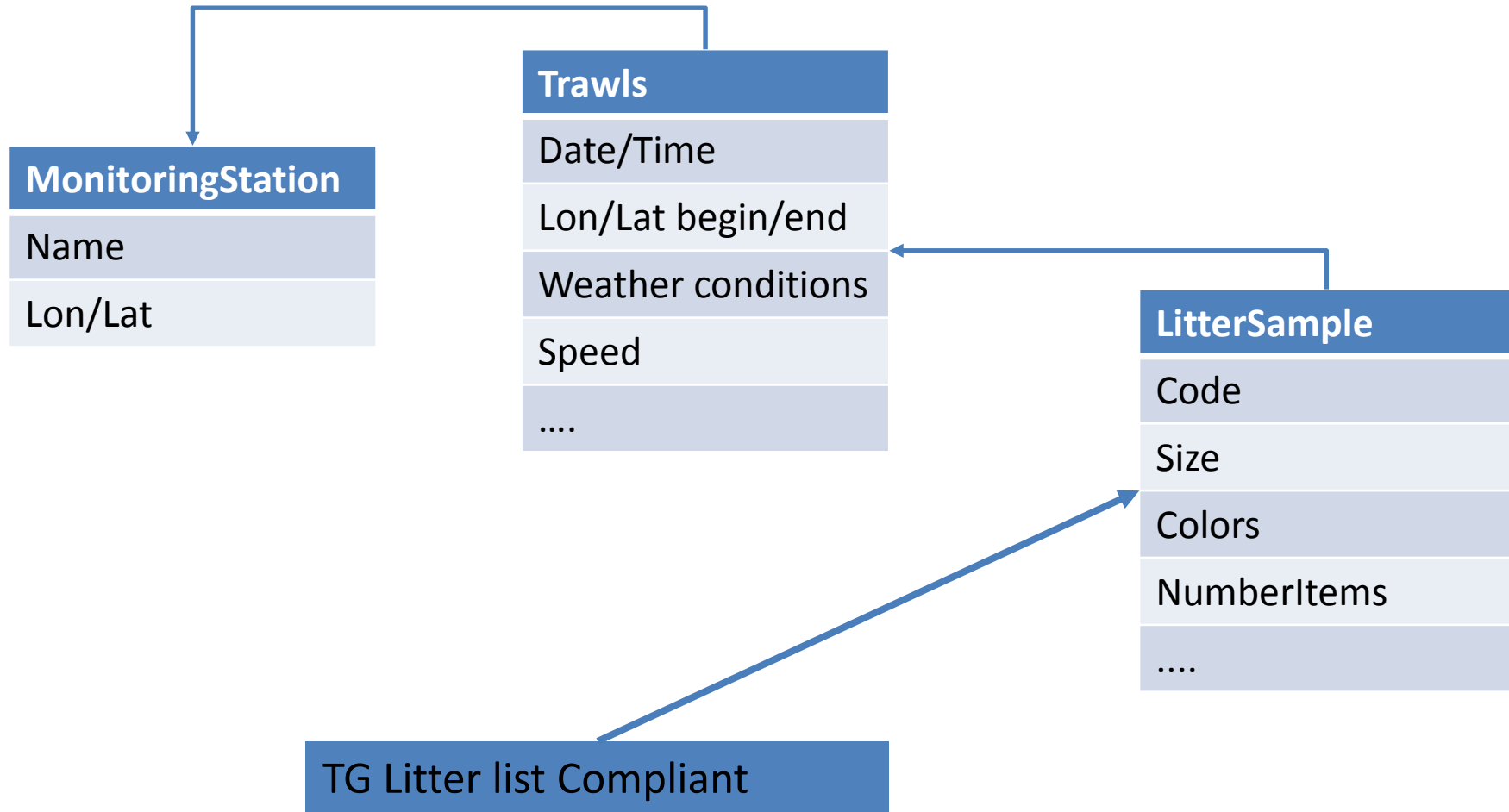
Information standards on EO9: Contaminants – Module 51

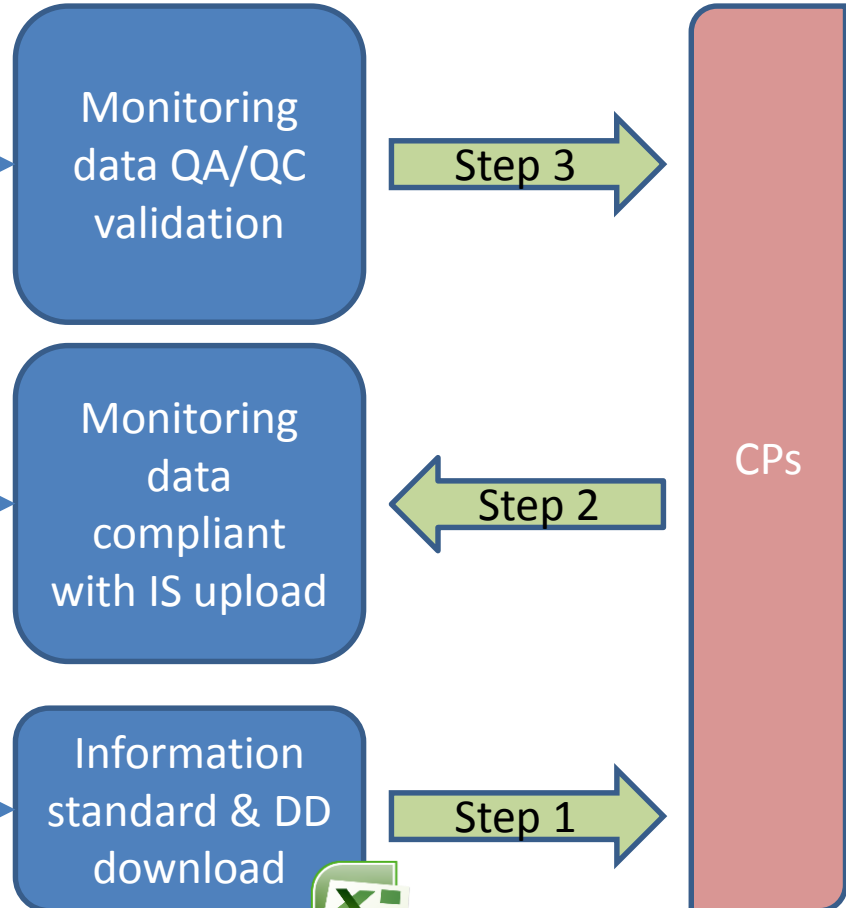
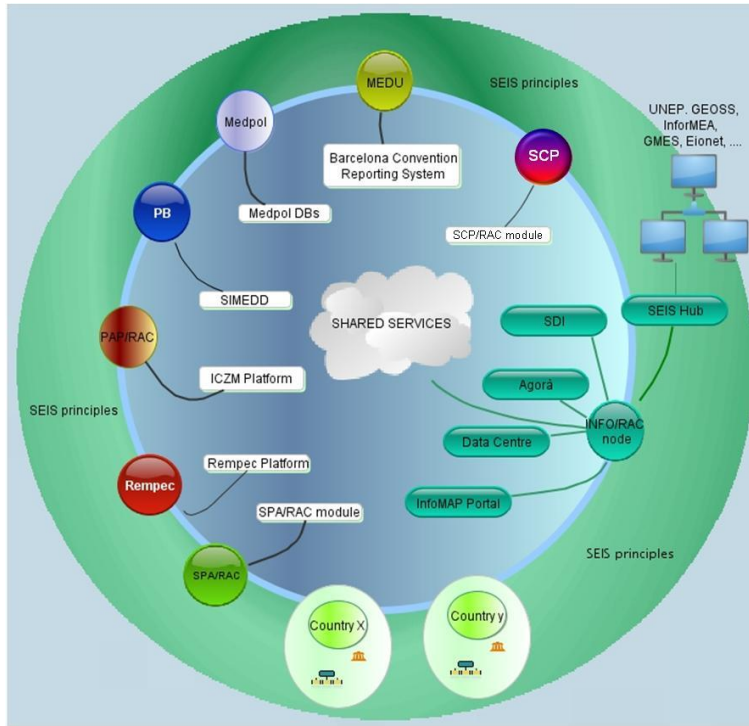


EO10: MarineLitter – Beach litter

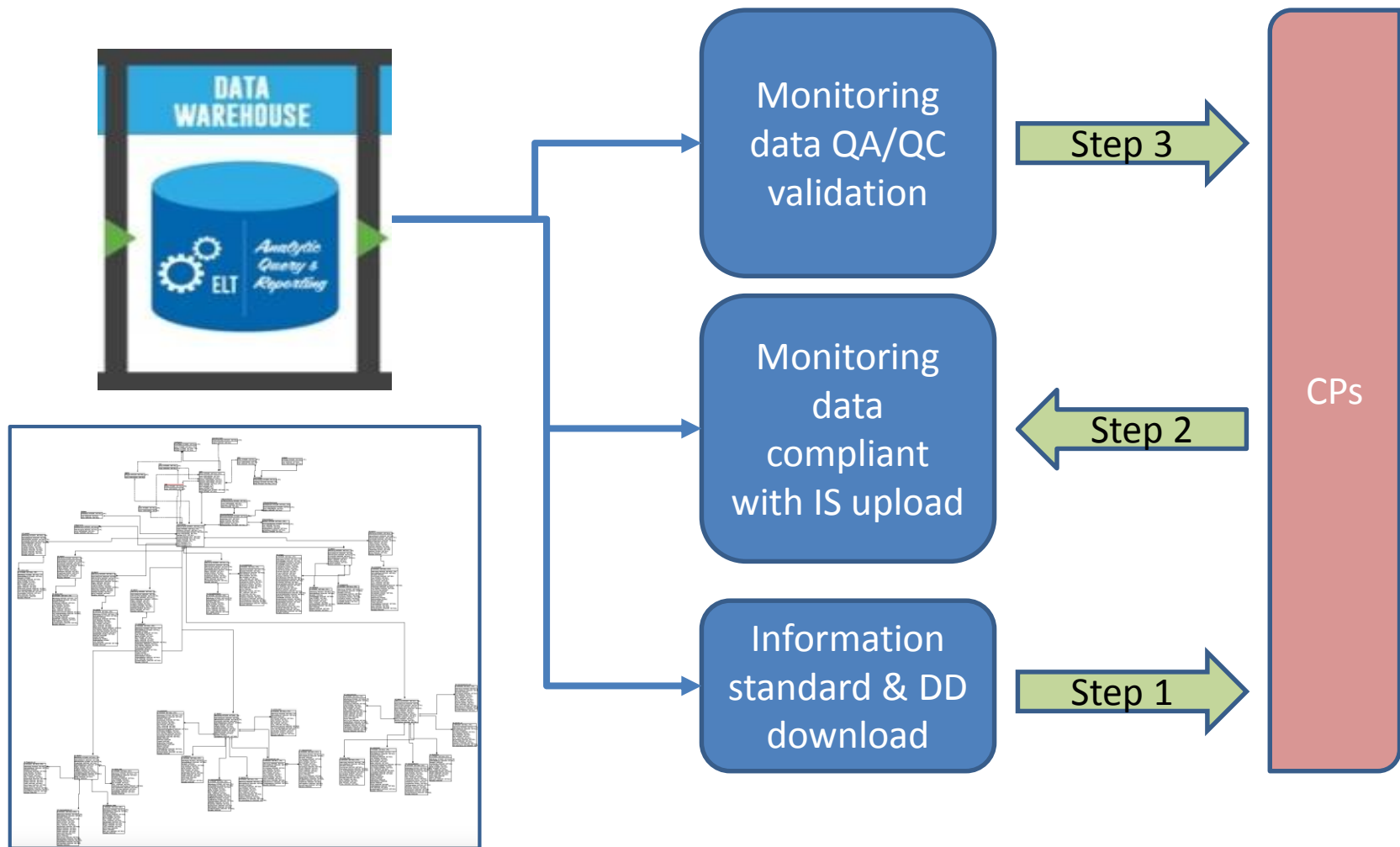


EO10: MarineLitter – Micro-plastics

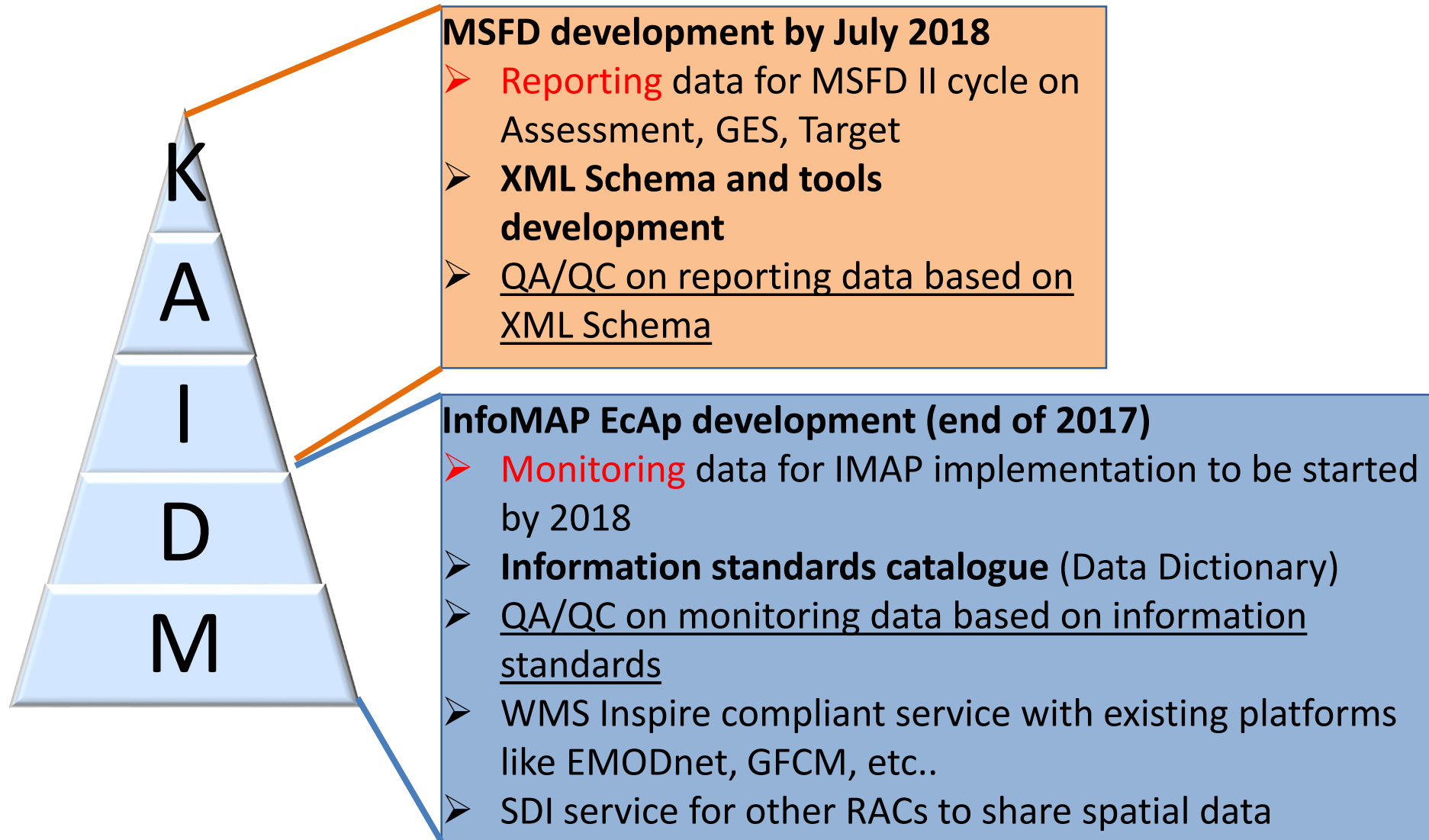




To be discussed and shared with RACs & CPs



Monitoring data model for EcAP



Thank You

