



European  
Commission

# UN/CEFACT Forum

**Marseille, France  
2-6 November 2015**

**Francky Callewaert**



# Background

# Total catches of world's leading producers (2011)

(volume in tonnes live weight and percentage of total)

China	16 046 114	17.02 %	
Peru	8 254 261	8.75 %	
Indonesia	5 713 101	6.06 %	
United States	5 162 997	5.47 %	
EU-28	4 889 188	5.18 %	
India	4 301 534	4.56 %	
Russia	4 261 503	4.52 %	
Japan *	3 848 955	4.08 %	
Chile	3 466 945	3.68 %	
Myanmar	3 332 979	3.53 %	
Vietnam	2 502 500	2.65 %	
Norway	2 433 811	2.58 %	
Philippines	2 363 679	2.51 %	
Thailand	1 862 151	1.97 %	
South Korea	1 761 785	1.87 %	
Bangladesh	1 600 918	1.70 %	
Mexico	1 571 437	1.67 %	
Malaysia	1 378 799	1.46 %	
Iceland	1 154 199	1.22 %	
Morocco	964 704	1.02 %	
Taiwan	903 892	0.96 %	

- **Overfishing**
- **Illegal fishing**

**Stock depletion**

# Fisheries control & management

## Data requests from:

- Coastal states
- Flag States
- (Regional) Fisheries management organisations
- NGO
- FAO
- Scientific bodies

# Reporting requirements

- **Vessel data**
- **Licence data**
- **Position data**
- **Catch data**
- **Gear data**
- **Landing data**
- **Sales data**
- **Scientific data**
- **Economic data**

- **Frequency**
- **Aggregation**
- **Format**
- **Availability**
- **Codes**
- **Deadlines**
- **...**

- **High Cost**
- **Poor data quality**
- **Very slow evolution**

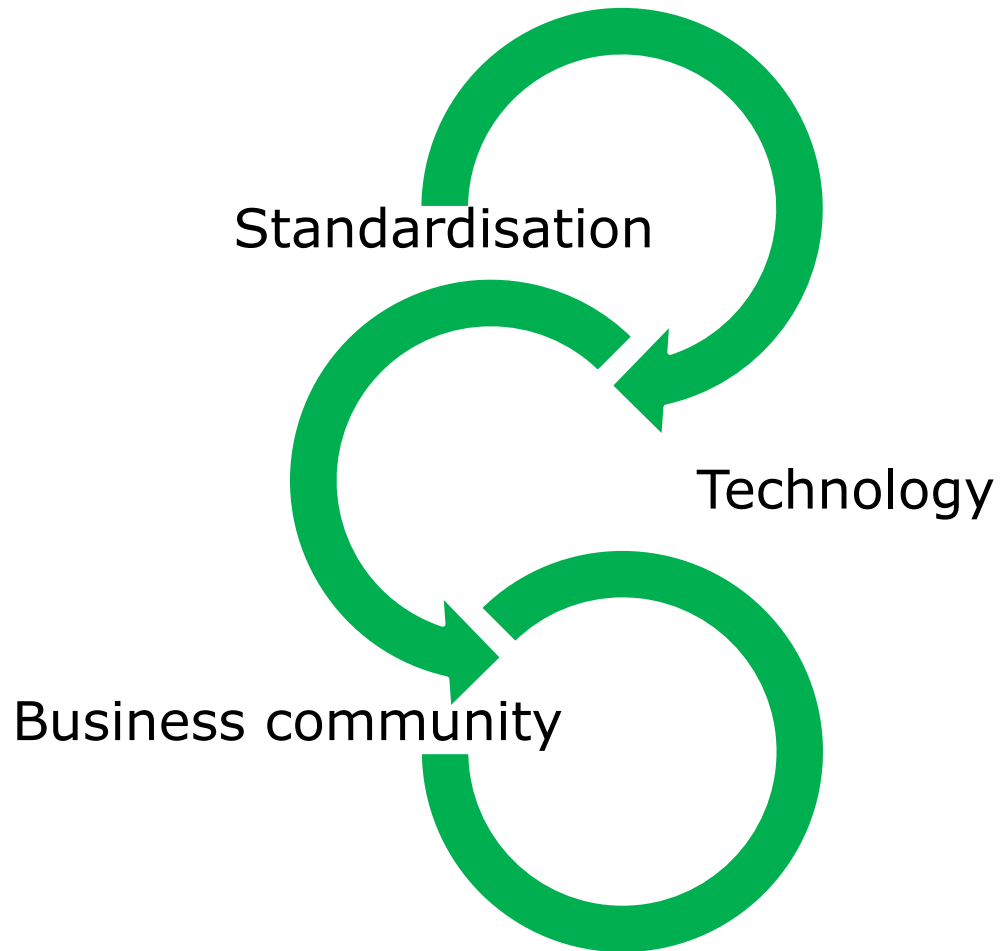
**Different data, formats**

# The IFDM programme goal



**Deliver high quality data  
In the most effective way**

# The approach



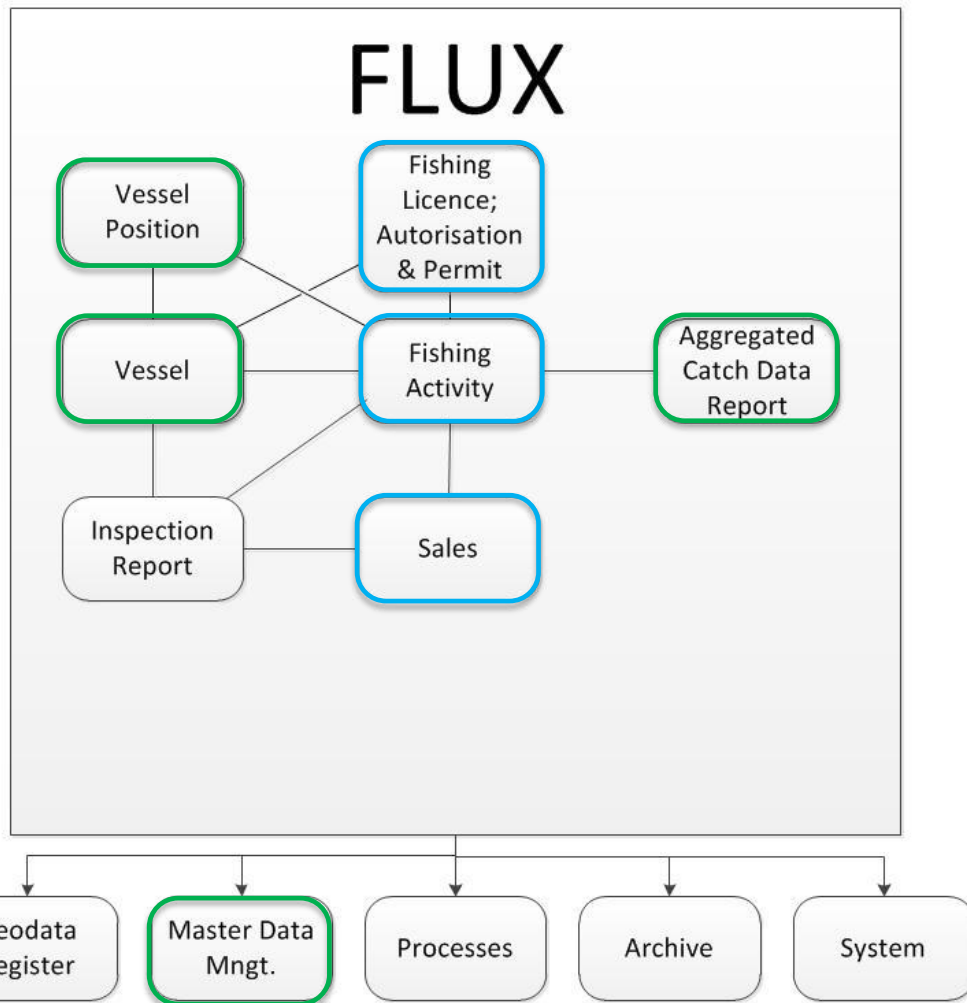
# Standardisation



# Progress

- **Project P-1000 Inception 09.06.2012**
- **Not “a walk in the park”**
  - Learning UN/CEFACT standardisation
  - Legal considerations
  - Political considerations
- **Strong support**
  - Advantages obvious
  - Potential to solve:
    - *issues with EU-ERS v3.1*
    - *Issues with other data flows*

# FLUX Business sub-domains



**P1000 - 1; General principles**

**P1000 - 2; Vessel domain**

**P1000 - 3; Fishing Activity (FA) domain**

**P1000 - 5; Sale domain**

**P1000 - 7; VMS domain**

**P1000 - 8; Inspection Report domain**

**P1000 - 9; Fishing Licence; Authorisation & Permit (FLAP) domain**

**P1000 - 10; Master Data Mngt. (MDM domain)**

**P1000 - 11; System domain**

**P1000 - 12; Aggregated Catch Data Report (ACDR) domain**

# Implementation in EU

## Early 2016

- P1000 - 1; General principles
- P1000 - 12; Aggregated Catch Data Report (ACDR)
- P1000 - 7; VMS domain

## Early 2017

- P1000 - 3; Fishing Activity (FA) domain
- P1000 - 5; Sale domain

## Mid 2017

- P1000 - 2; Vessel domain
- P1000 - 9; Fishing Licence; Authorisation & Permit (FLAP)

## Not on critical path

- P1000 - 10; Master Data Mngt. (MDM domain)
- P1000 - 8; Inspection Report domain
- P1000 - 11; System domain

# Outside EU

- **Agreed record with Norway: VMS**
- **FAO; Global Fleet Register (vessel domain)**
- **Testing during 2016 with**
  - NEAFC
  - NAFO
- **Communication started with:**
  - **Canada**
  - **Faroe**
  - **Greenland**
  - **Iceland**
  - **United states**
- **WCPFC**
  - **Morocco**
  - **Mozambique**
- **SEAFO**
  - **Seychelles**
- **SPRFMO**
  - **Sao Tome**

# Technology

**A module**

for each aspect of the **IFDM programme**:

Electronic recording and reporting system (ERS)

Vessel Monitoring System (VMS)

Licence Workflow

FLEET Project

Aggregated catch data reporting

Master Data Register (MDR)

**The Fisheries software suite:**  
a common layer with a modular approach

**Abilities:**

**receive** all fisheries data

**analyse** all fisheries data

**send** all fisheries data

**Utilities:** **visualise** content

**receive** content

**store** content



# Transportation Layer

- **Configurable software**
  - Based on SOAP
  - Including workflows for handling exceptions
  - "Bridge" to link local IT systems with the TL
- **Protocol called "The envelope"**
  - Set of parameters determining the behaviour of the software
  - Can contain any well formatted XML business content
  - Content unaware

# Envelope

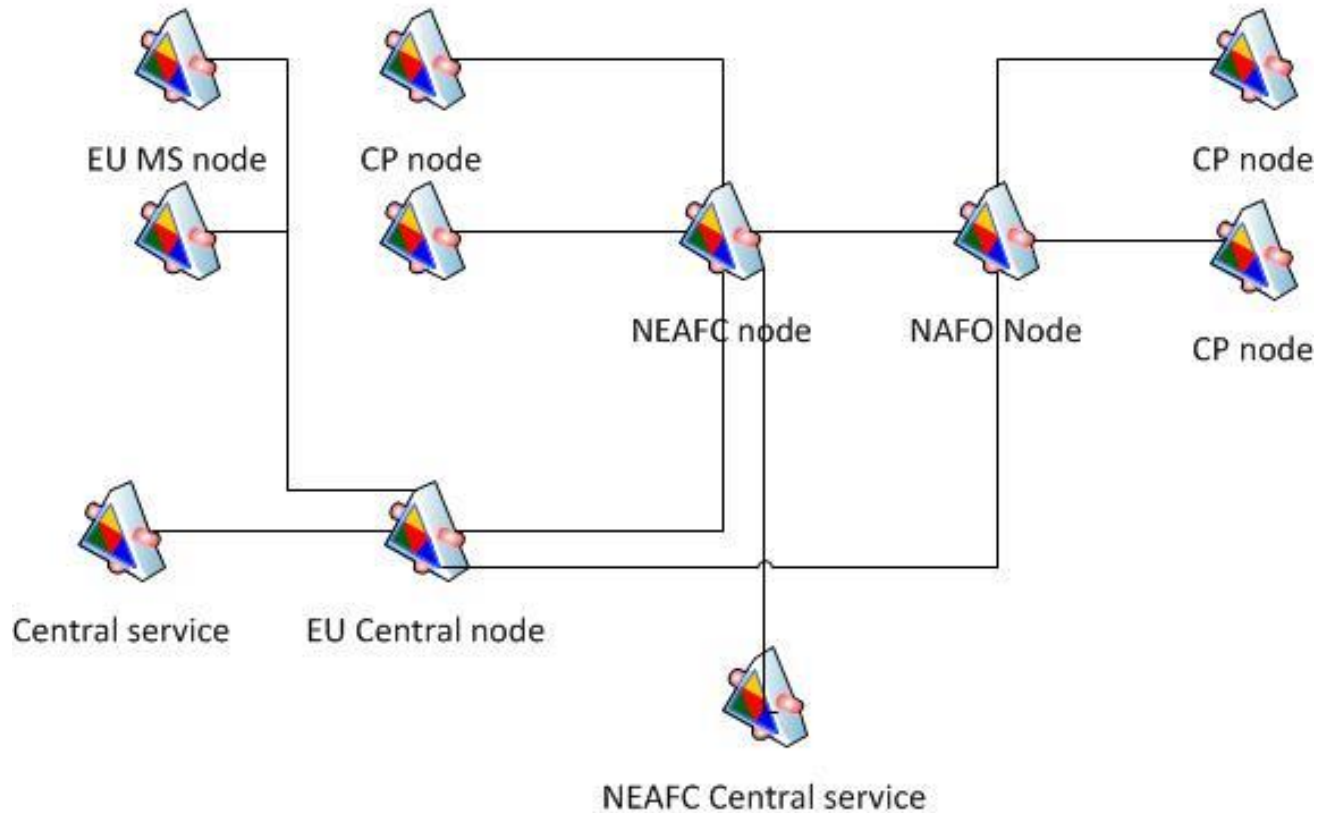
Data Element	Code	Mandatory/Optional	Description
<b>From</b>	FR(*)	M	Address of the envelope originator Endpoint.
<b>Operation number</b>	ON(*)	M	Unique Operation Number generated by the system
<b>Address</b>	AD	M	Address of the envelope destination Endpoint.
<b>Data flow</b>	DF	M	Data flow name
<b>Message time out</b>	TODT	M	The Message Timeout given as an XSD DateTime (UTC). Indicates the time limit which the business content is considered to be expired.
<b>Acknowledge of receipt</b>	AR	M	Boolean indicating if an Acknowledge-of-Receipt (STAT) is expected by the originator Endpoint.
<b>Contact persons</b>	CT	O	Space-separated list of e-mail addresses of contact persons
<b>Verbosity level</b>	VB		verbosity level telling which type of events need to be reported by e-mail
<b>Time out</b>	TO		Indicates the synchronous timeout value in seconds.



# Network example

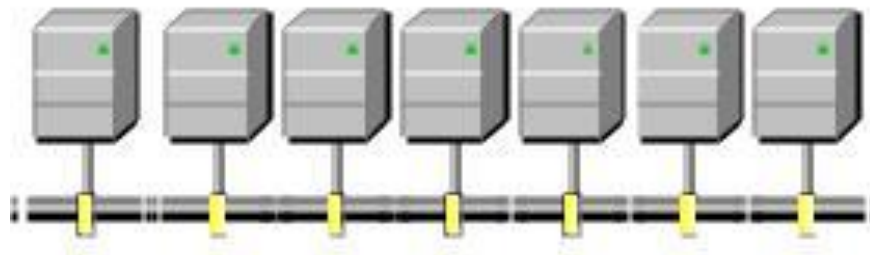
## FLUX TL based network: Physical topology

Physical network topology expanded (example)



# Logical topology

Logical topology



Node 1   Node 2   Node 3   Node 4   Node ..   Node ..   Node ..



## Physical topology becomes "unimportant"

- Configuration can be adapted to new needs
- Data flows can be optimized
- Network can organically grow

## Each node can be configured according to its role

- Load balancing between instances
- Automated data flow optimisation

# State of Play

- **Version 1: Operational**
  - Transportation layer
  - DG Mare, EFCA, 20 EU Member States
  - NEAFC
  - Testing:
    - *NAFO, Norway...*
- **Version 2: Spring 2016**
  - Version 1
  - + VMS software

- **Version 3: Autumn 2016**
  - Version 2
  - + ERS Software (Fishing activities, Sales)
- **Version 4: ?**
  - Version 3
  - + Vessel & licence

# For extra information

- **IFDM deliverables:**

**<https://circabc.europa.eu/w/browse/9d6098eb-e128-45ae-a4ca-5703b31d8257>**

