

Introduction to FLUX

Wim van Koningsveld

Bangkok, 29 september 2016

Introduced as a UNCEFACT expert but

-in daily life a Senior Regulation Officer at the Dutch Ministry of Economic Affairs

-more relevant: ex-chairman of the FLUX Fishing Activities Working Group that proposed the Fishing Activities standard

Content

- ▶ **What is FLUX**
- ▶ **Implementation**
- ▶ **User community**



2

What is FLUX: and what it is not

Implementation: what to do before actual implementation

User Community: share experiences – invitation to the afternoon workshop

FLUX

Fisheries Language for Universal eXchange



3

- 1-It is a language and only a language – nothing more. It is not a system. FLUX is only the messenger.
- 2-Fisheries: initially designed for “anything that smells fish” but limited to events up to first sale
- 3-Approved as a standard in April 2016 during the Geneva UNCEFACT Forum and received a lot of attention.
- 4-Hailed as a tool to achieve SDG 14 and to combat IUU fishing.

FLUX

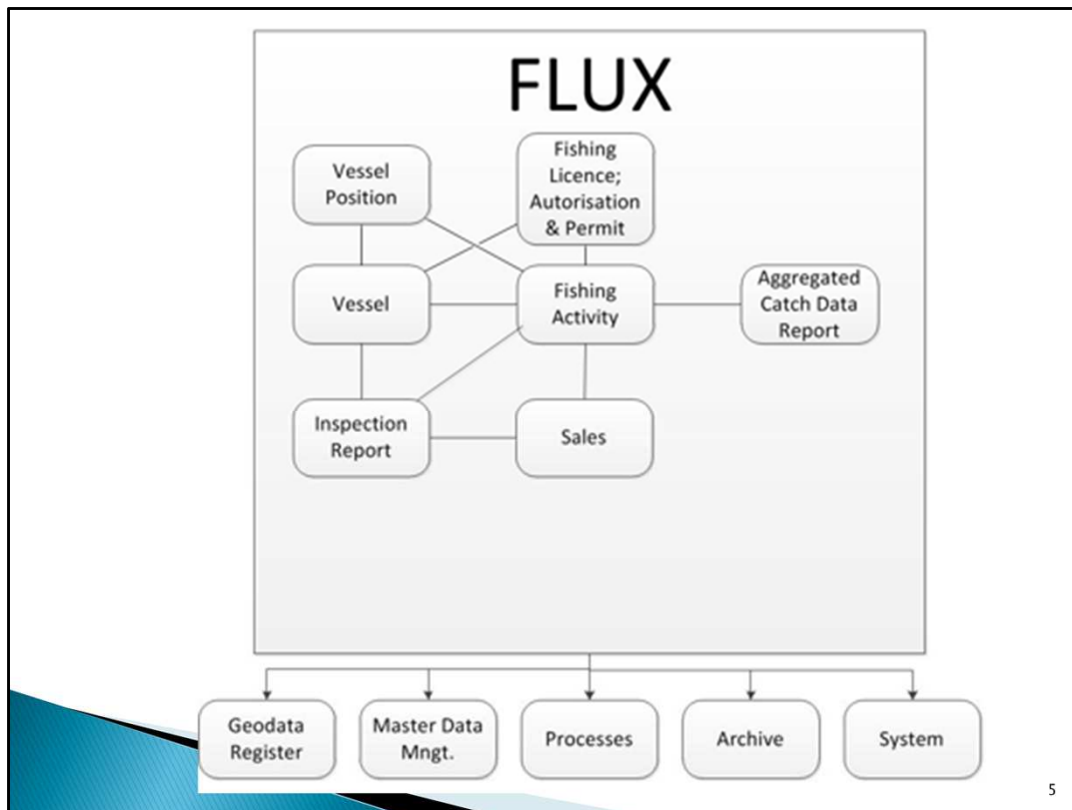
Exchanging messages from catch to first sale:

- **Including catch; processing on board; landing, transshipment, transport, first sale; inspection, vessel position; vessel information; vessel licences.**
- **Excluding trade after first sale**

4

Catch: anything that is taken out of the water (sea, canal, lake, river, pond, ...) and is a common resource (like wild fish)

Vessel: any floating means of hunting, searching, transporting or processing of fish and fishery products, e.g. fishing vessel, factory vessel, carrier vessel, kayak, canoe ...



FLUX scope too wide to be effectively managed → split up in “domains”.

Domain: family of messages about a common subject.

This is not a database structure – it is a message structure

Example: vessel information in a Fishing Activity message is in a message from the Vessel domain as part of the Fishing Activity message

Domain Inspection Report: under construction – expected early 2017

Below the FLUX box: supporting domains (nice to have)

Only Master Data Management is realised as a standard.

Master Data Management: easy exchange/share code lists

FLUX

- ▶ **Domain = “message family”**
- ▶ **Domains can be used stand-alone**
- ▶ **Domains can be linked to other domains**

6

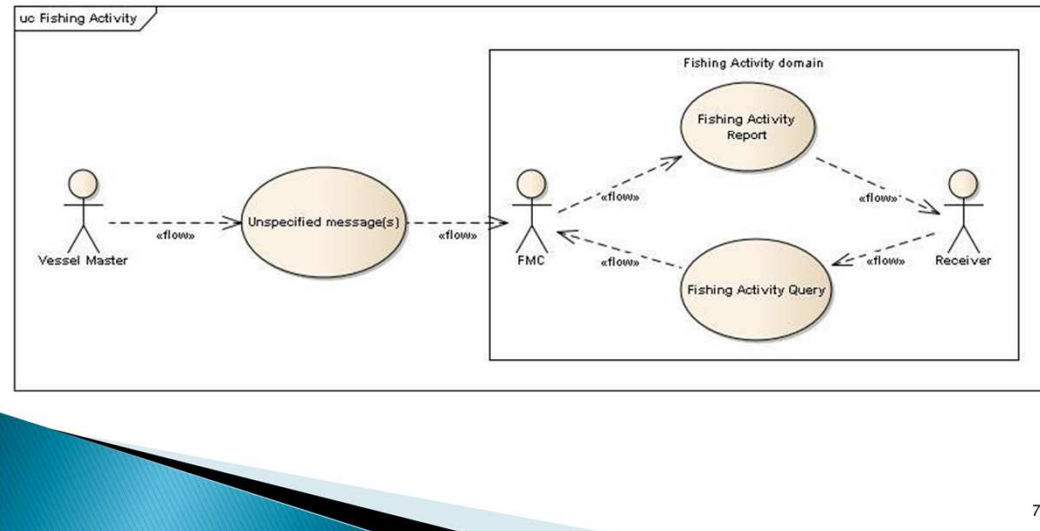
Domain linking: linking between message families!

Data linking (e.g. specifying a specific catch in a Sales message) can only be done in a FLUX message when the underlying IT-system supports this: FLUX then mirrors the IT-system.

FLUX supports identifiers on “interesting parts” of the message so other messages/systems can refer to it. This aids Tracking and Tracing and supports combatting IUU (e.g. you cannot sell what you did not catch etc.)

FLUX

Scope:



Slide contains Fishing Activity message scope as an example. Same scope for all FLUX domains.

Primary scope of the exchange of messages: G2G – between authorities. It is not of interest to FLUX how the authority collects the data (hence the “Unspecified message(s)” in the slide) as long as it collects all the data that is needed for a message. E.g. data for one FLUX message can be collected from one or more “Unspecified message(s)”, via e-mail, fax, satellite, jungle drum, ...

Secondary scope: B2G and G2B. E.g. FLUX can also be used for the exchange between the fisherman and the FMC of his flagstate. This message will probably differ from a message in the primary scope but it will still be a FLUX message.

FLUX

Build-in message flexibility:

- ▶ Optionality of elements
- ▶ No pre-defined codes
- ▶ 'characteristics' concept
- ▶ Notification/declaration
- ▶ Push, pull or both
- ▶ Corrections and deletions

8

FLUX was designed to be used all over the globe. From the eskimo in his unmarked kayak to a factory vessel.

It has a lot of built-in flexibility:

-First two are standard UNCEFACT practices. FLUX does not contain pre-defined codes for fishing operations (because everybody has different operations...)

-Characteristics: flexible and extensible mechanism to include items that the standard does not contain, e.g. gear properties and research data.

-Every message (where relevant) can be a message of intention (notification) or a message of executed activity (declaration)

-Message can be sent on the sender's initiative (push) or on request of the receiver (pull).

-FLUX includes corrections and deletions of messages

Risk of misunderstanding between partners because of this flexibility (just like in real life).

Implementation

- ▶ Exactly define optionality
- ▶ Define code lists & characteristics to use
- ▶ Define message frequency
- ▶ Define push/pull functionality
- ▶ Define business rules
- ▶ Define fallback procedures
- ▶ Define technical details
(transmission, network, ...)



9

Sit down with business-, IT- and legal experts of all(!) the partners involved in the exchange of messages and take out all the flexibility and ambiguity: write down all the agreements in an Implementation Document.

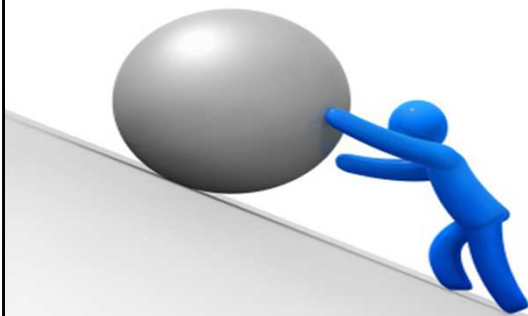
Message frequency: when to send what and to whom! In real time? Once a day? ...

Technical details are not part of the standard. Network topology ("spoke and hub", network, ...) and transmission system (e-mail, FTP, ...) to be agreed: FLUX does not care.

Implementation

Not to be underestimated!

Example: implementation guide for Fishing Activities message exchange in EU contains more than 100 pages.



10

That's only for the Fishing Activities domain...

Implementation documents are needed for every FLUX domain (Sales, Vessel, ...)

FLUX User Community

Ease the implementation burden:

- ▶ Share experiences
- ▶ Offer advice and assistance

- ▶ Open Source tools (via FOCUS Community):
 - FLUX Transport Layer
 - Vessel position viewer



11

The effort to compose an Implementation Document is significant. This could scare potential FLUX users away. To support (potential) FLUX users, UNCEFACT proposed a FLUX User Community. This community is meant to share experiences, offer advice and assistance and to maintain and promote the FLUX standard.

The community will be the subject of the workshop in the afternoon.

The FOCUS community is a closely linked, independent body to support tools in the Open Source domain based on FLUX messages:

-FLUX Transport Layer is an alternative means to send and receive FLUX messages. It does not have the disadvantages of e-mail, FTP etc. and it makes it very easy to send and receive FLUX messages.

-Vessel position viewer: application to visualise the current and previous positions of the vessels in your fleet on a map of your choice. Based on the exchange of FLUX messages.

Thank you



12

This presentation did not even cover the top of the FLUX iceberg. Thank you for sitting through it.