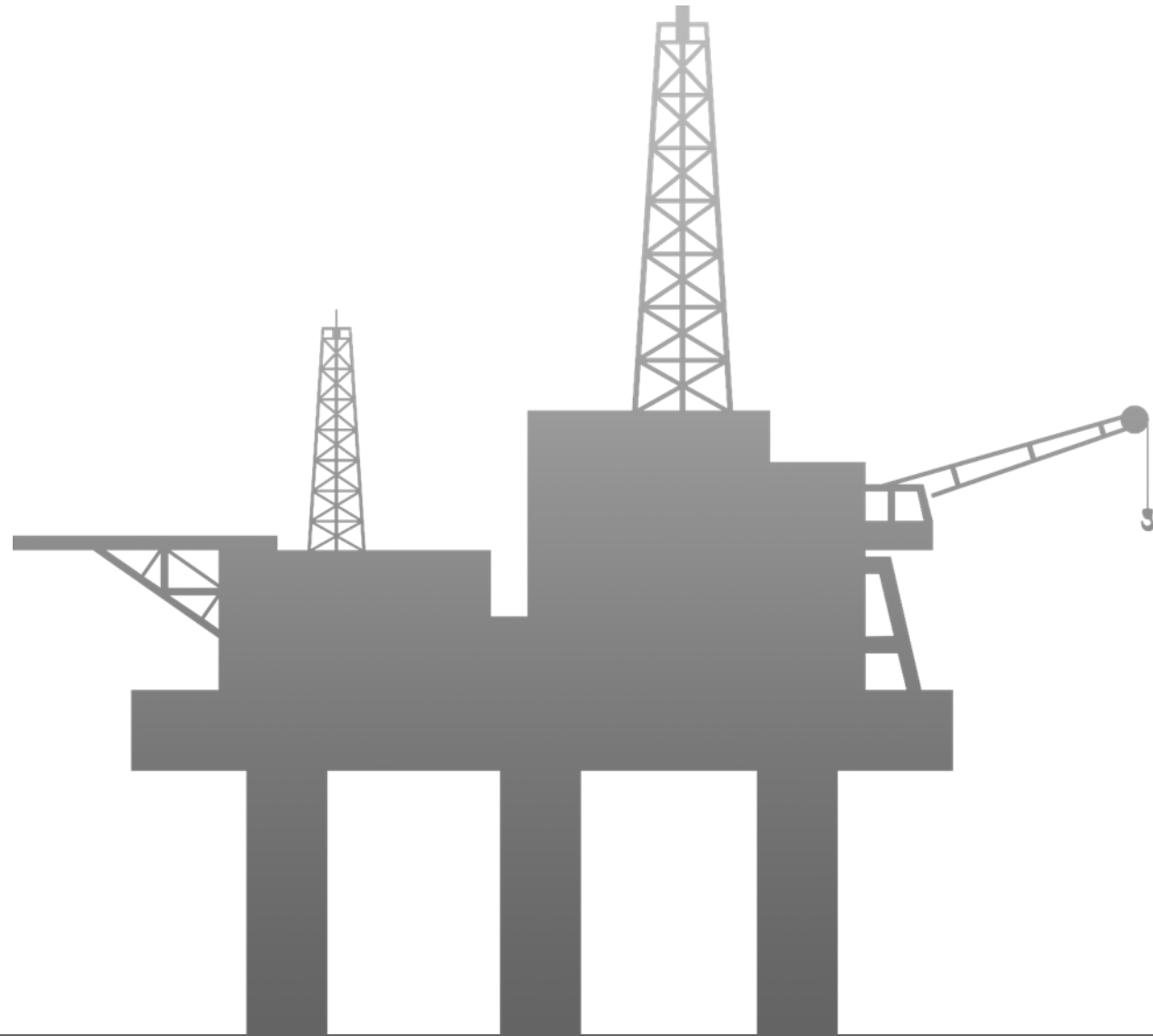# EPIM

New Format for Production Reporting on NCS

May 7 2014

Content

- **About EPIM**

- **New Schema for Production Reporting**

- **How/when to use it?**

- **How to get started?**

- **How to submit Production Reports**

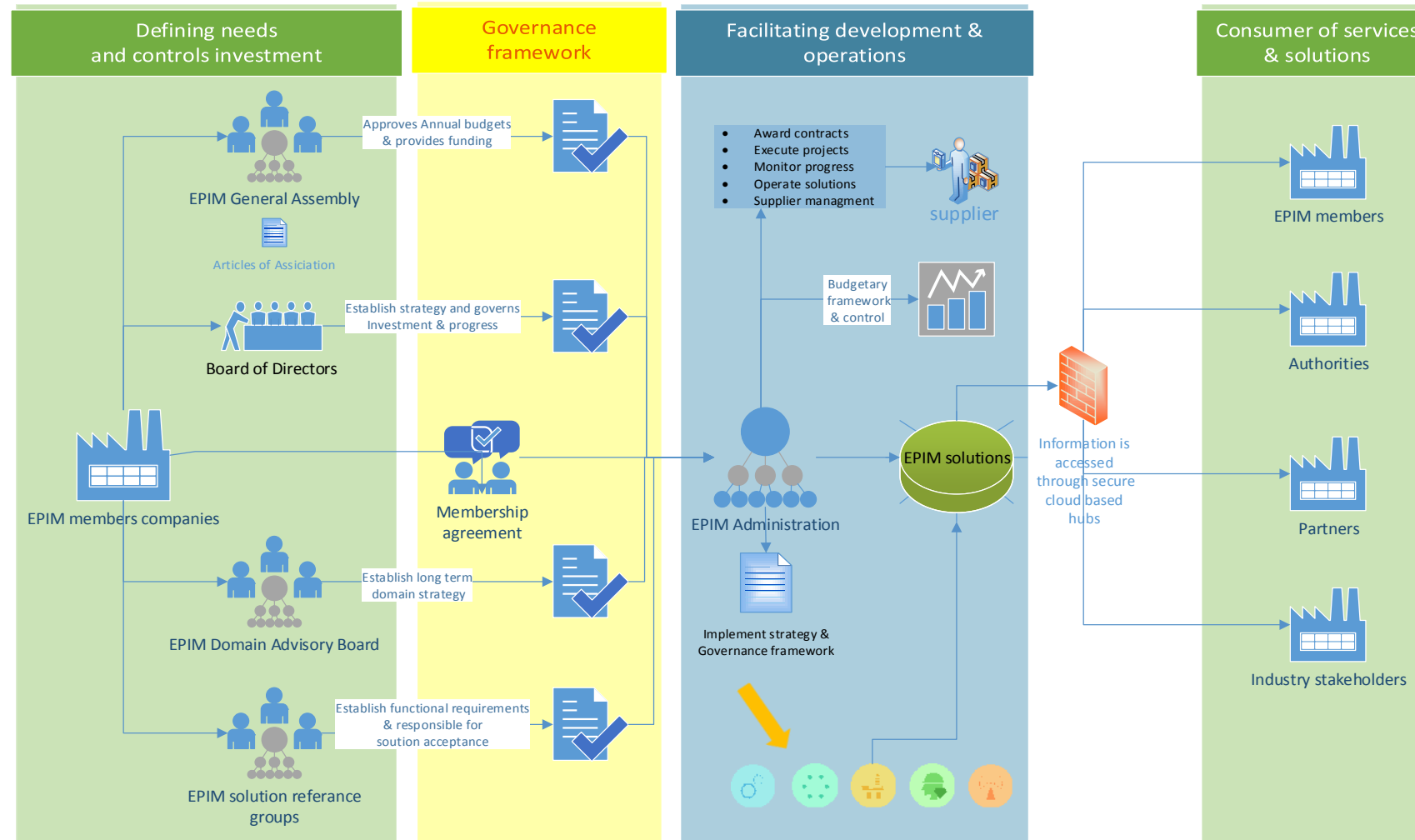- **Released versions and version control**

EPIM

By the industry, for the industry.

Facilitating solutions and services for the
oil & gas industry through standardization
of requirements and processes.

EPIM Governance Framework

EPIM Domains and Services

Joint Venture Management
- ▸ License2Share
- ▸ Gas Sales Tax Reporting

Health, Safety & Environment
- ▸ EnvironmentHub
- ▸ General Safety Training

Exploration & Production
- ▸ ReportingHub
- ▸ Outcrop
- ▸ Norwegian Deepwater Programme
- ▸ Reporting Formats
- ▸ SAM-X

Supply Chain Management
- ▸ EqHub
- ▸ LogisticsHub

Infrastructure & Technology
- ▸ SOIL

New Schema for Production Reporting

- **Development started approx.. 10 years ago**
- **Goal:**
  - Replace existing text-based COPEX report
  - Standardized format for production reporting
  - One XML schema as a basis for reporting
    - To partners and authorities
    - Monthly and daily

Released versions and version control

Version Control

EPIM is the responsible body for maintaining and enabling enhancement to the MPRML

This task is handled by the "MPRML steering group"

Two released versions of the schema

→ MPRML1.0.0

→ MPRML1.0.1

    → An authority report based on the MPRML1.0.1 shall validate against MPRML1.0.0

    → Main different: some element set as optional in MPRML1.0.0 are mandatory in MPRML1.0.1

EPIM recommends operators to use MPRML1.0.1

How/when to use it?

Monthly Production Report to Authorities

Monthly Production Report to Partners

Daily Production Report to Partners

Monthly Production Report to Authorities

- **This format will replace the existing COPEX format**

- **(COPEX will be accepted until 1 Januar 2016)**

- **For requirements on what to report visit NPD homepage**
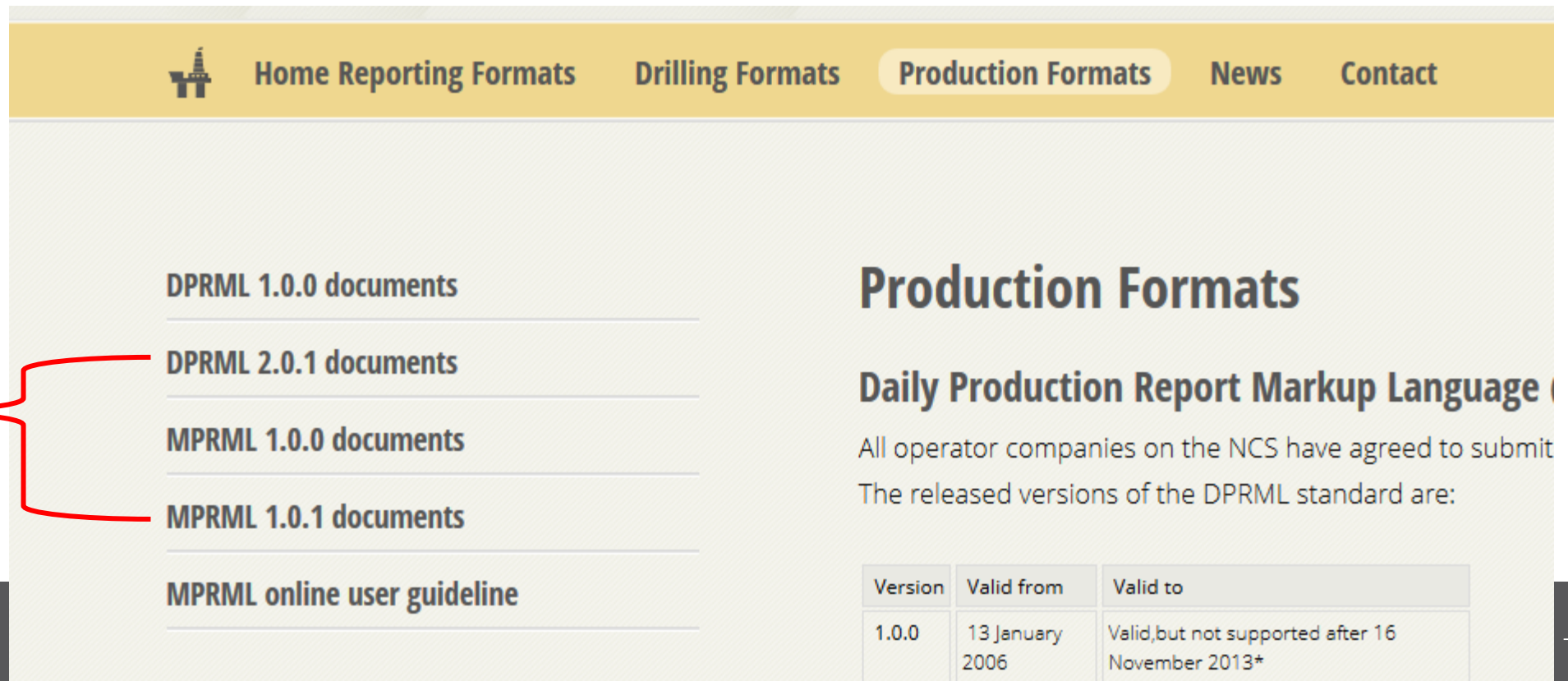
Monthly Production Reporting to Partners

- **Currently operators share production data with partners in many different ways, on different formats and with different naming**
  - ➤ Many tailor-made solutions are needed for partners to load data into internal systems

- **MPRML gives operators and partners a standardized and common agreed format**
  - ➤ Operators only need one format to conform to
  - ➤ Partners only need one format to conform to

Daily Production Reporting to Partners

- **Currently (most) operators share production data with partners in the DPRML1.0.0**

- **EPIM encourages all users to adopt to the new MPRML1.0.1 format for daily production report**

Identical

Home Reporting Formats   **Drilling Formats**   **Production Formats**   **News**   **Contact**

DPRML 1.0.0 documents

DPRML 2.0.1 documents

MPRML 1.0.0 documents

MPRML 1.0.1 documents

MPRML online user guideline

Production Formats

Daily Production Report Markup Language (

All operator companies on the NCS have agreed to submit

The released versions of the DPRML standard are:
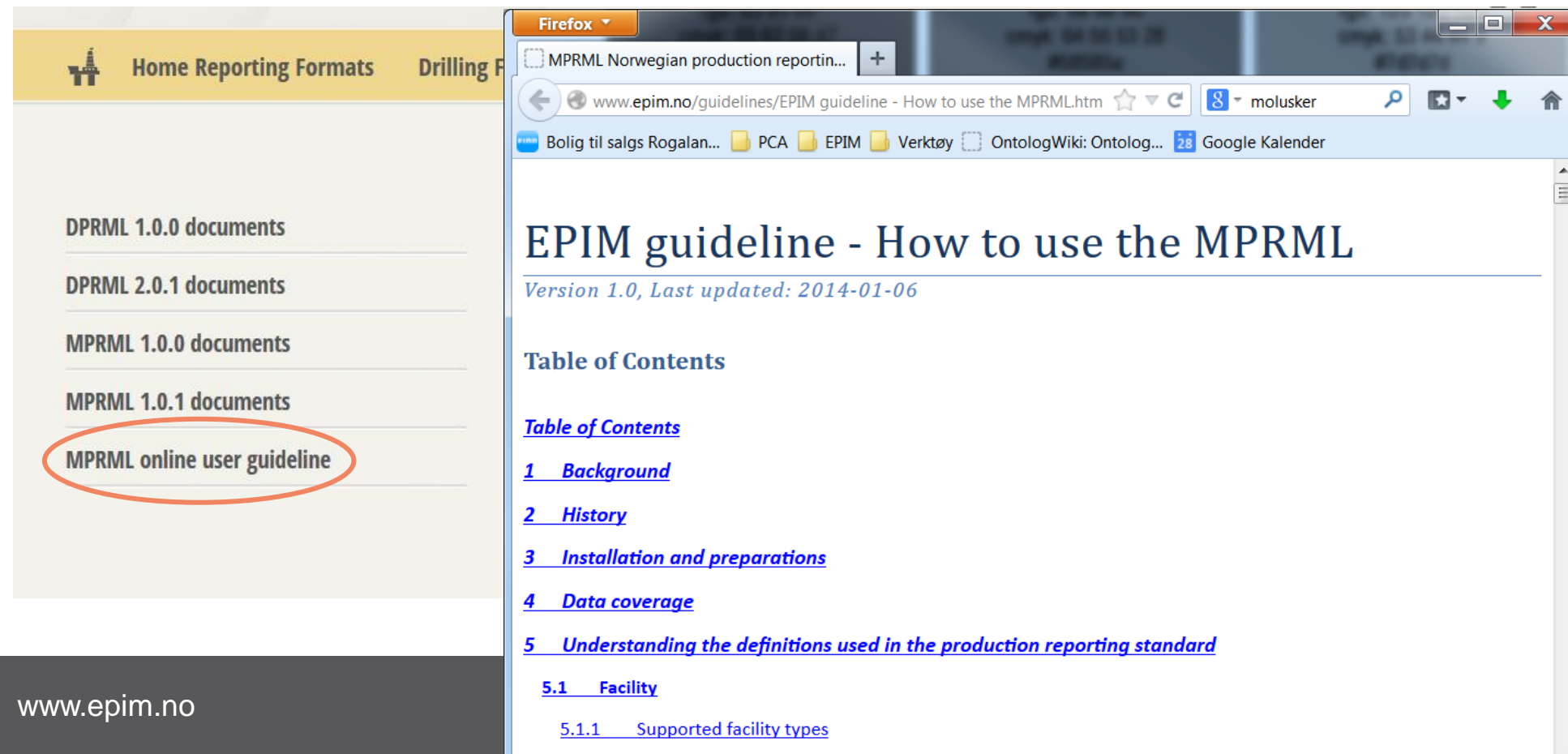
Version	Valid from	Valid to
1.0.0	13 January 2006	Valid, but not supported after 16 November 2013*

How to get started?

The schemas can be downloaded from EPIM web pages

http://www.epim.no/epim/main/home

EPIM guideline on how to use the schema is available from same page

Visit the MPRML repository on GitHub

https://github.com/EPIM-Association/MPRML/issues

For access to this repositrory contact ep-domain@epim.no

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How to submit Production Reports

- **Monthly to Authorities**
  - ERH – Requires MPRML1.0.1
  - Directly to NPD – Requires MPRML1.0.0 or MPRML1.0.1

- **Monthly to Partners**
  - ERH – Requires MPRML1.0.1

- **Daily to Partners**
  - ERH – Required MPRML1.0.1 (DPRML2.0.1)

Partner

MPR-G
MPR-P
DPR

MPR-P
DPR

Operator MPR-G
MPR-P
DPR

Hydrocarbon
accounting system

MPR-G

ERH
EPIM ReportingHub

MPR-G

NORWEGIAN PETROLEUM
DIRECTORATE
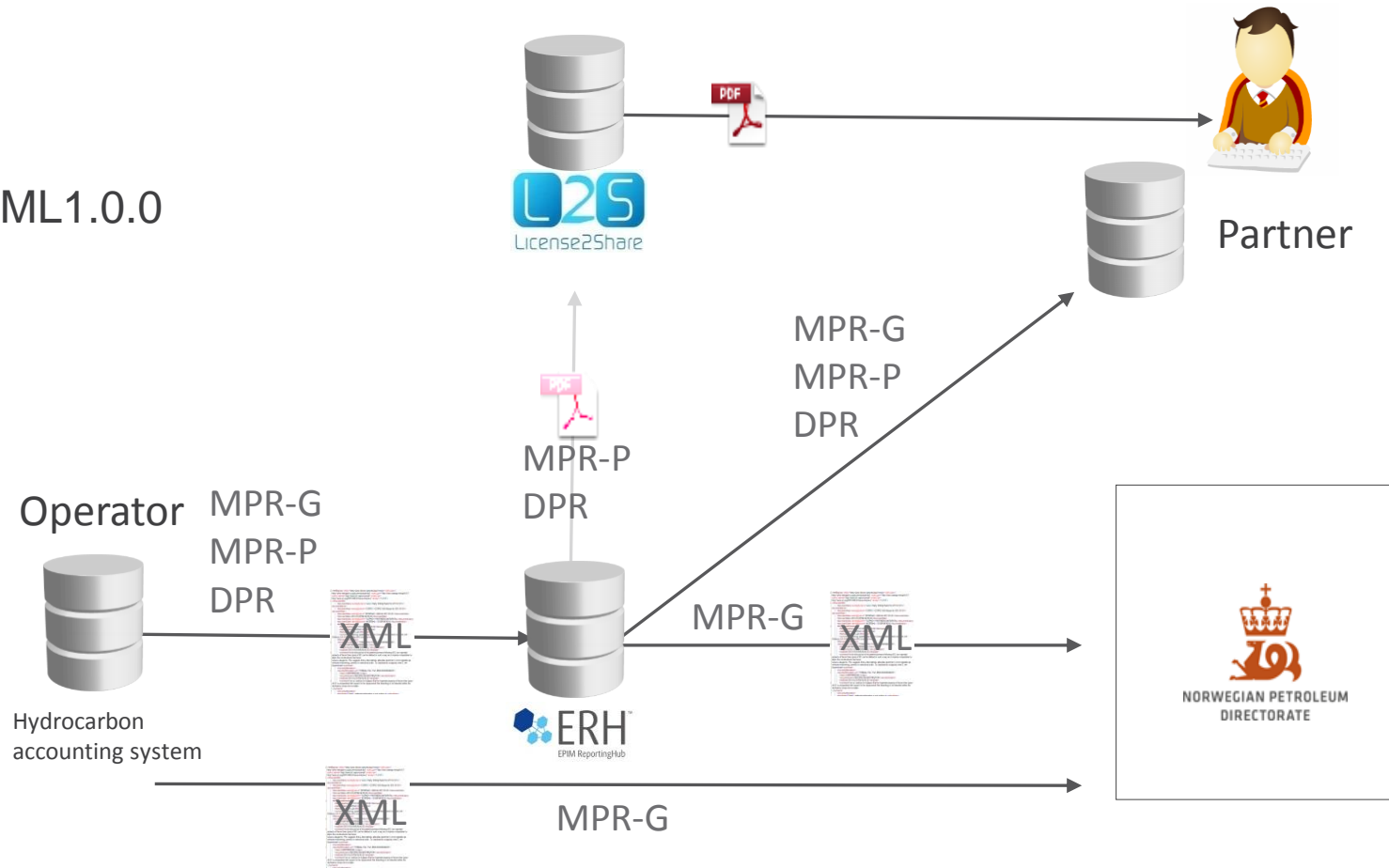
```xml
<?xml version="1.0" encoding="UTF-8" ?>
- <objects version="1.0(MPRML)" xmlns="http://www.epim.no/schemas/mprml/1" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  + <context xsi:type="obj_report">
  - <object xsi:type="obj_productVolume">
      <name>ÅSGARD</name>
      <installation kind="field" namingSystem="NPD" uidRef="43765">ÅSGARD</installation>
      + <facility>
      + <facility>
      + <facility>
      + <facility>
    </object>
  - <object xsi:type="obj_productVolume">
      <name>MIKKEL</name>
      <installation kind="field" namingSystem="NPD" uidRef="1630514">MIKKEL</installation>
      + <facility>
    </object>
  - <object xsi:type="obj_productVolume">
      <name>YTTERGRYTA</name>
      <installation kind="field" namingSystem="NPD" uidRef="4973114">YTTERGRYTA</installation>
      + <facility>
    </object>
</objects>
```

This element is now required

```xml
<?xml version="1.0" encoding="UTF-8"?>
- <objects version="1.0(MPRML)" xmlns="http://www.epim.no/schemas/mprml/1" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
    + <documentInfo>
    + <context xsi:type="obj_report">
    + <object xsi:type="obj_productionOperation">
    + <object xsi:type="obj_productionOperation">
    + <object xsi:type="obj_productionOperation">
    + <object xsi:type="obj_productionOperation">
    + <object xsi:type="obj_productionOperation">
    + <object xsi:type="obj_productionOperation">
    + <object xsi:type="obj_wellTest">
    + <object xsi:type="obj_wellTest">
    + <object xsi:type="obj_wellTest">
    + <object xsi:type="obj_wellTest">
    + <object xsi:type="obj_wellTest">
    + <object xsi:type="obj_wellTest">
    - <object xsi:type="obj_productVolume">
        <name>KRISTIN</name>
        <installation namingSystem="NPD" uidRef="1854729" kind="field">KRISTIN</installation>
      - <facility>
            <name namingSystem="NPD" uidRef="1854729" kind="field">KRISTIN</name>
            <facilityParent1 namingSystem="String" uidRef="x" kind="block valve">String</facilityParent1>
            <facilityParent2 namingSystem="String" uidRef="x" kind="block valve">String</facilityParent2>
            <facilityAlias namingSystem="String">String</facilityAlias>
            <facilityAlias namingSystem="String">String</facilityAlias>
            <contextFacility namingSystem="String" uidRef="x" kind="block valve">String</contextFacility>
            <contextFacility namingSystem="String" uidRef="x" kind="block valve">String</contextFacility>
          - <downtimeReason uid="cef019cf-086f-11e2-85fc-d067e534860e">
                <who>MR Who</who>
                <role>Platform manager</role>
                <dTimStart>2012-03-01T02:00:00.0Z</dTimStart>
                <dTimEnd>2012-03-01T04:00:00.0Z</dTimEnd>
                <remark>Of course, the earlier discussion of deviance is rather different from the traditional practice of g</remark>
            </downtimeReason>
          - <downtimeReason uid="cef040e1-086f-11e2-a84c-d067e534860e">
                <who>Mr Who2</who>
                <role>Platform manager 2</role>
                <dTimStart>2012-03-01T06:00:00.0Z</dTimStart>
                <dTimEnd>2012-03-01T14:00:00.0Z</dTimEnd>
                <remark>Furthermore, the speaker-hearer's linguistic intuition raises serious doubts about the extended c-co</remark>
            </downtimeReason>
          - <flow>
                <kind>production</kind>
```

This element is now required

```xml
<object xsi:type="obj_productVolume">
  <name>KRISTIN</name>
  <installation kind="field" namingSystem="NPD" uidRef="1854729">KRISTIN</installation>
  <facility>
  <facility>
    <name kind="flow meter" namingSystem="STATOIL" uidRef="NaN">Fiscal metering station 1</name>
    <facilityParent1 namingSystem="String" uidRef="x" kind="block valve">String</facilityParent1>
    <facilityParent2 namingSystem="String" uidRef="x" kind="block valve">String</facilityParent2>
    <facilityAlias namingSystem="String">String</facilityAlias>
    <facilityAlias namingSystem="String">String</facilityAlias>
    <contextFacility namingSystem="String" uidRef="x" kind="block valve">String</contextFacility>
    <contextFacility namingSystem="String" uidRef="x" kind="block valve">String</contextFacility>
    <flow uid="KRISTIN_MPM1_FISCAL_VOLUMES">          This attribute is now required
      <name>Kristin MPM1 measured volumes</name>
      <kind>production</kind>
      <qualifier>metered - fiscal</qualifier>
      <version>2012-02-01T09:00:00.0Z</version>
      <versionSource>version src 826</versionSource>
      <gor uom="Euc">49.69</gor>
      <gorMTD uom="m3/m3">60.39</gorMTD>
      <waterConcMass uom="%">50.75</waterConcMass>
      <waterConcVol uom="ppm">73.72</waterConcVol>
      <atmosphere uom="Pa">23.85</atmosphere>
      <volumeValue>
        <volume status="comm failure" uom="m3">950.17</volume>
        <grossCalorificValue uom="J/m3">737.98</grossCalorificValue>
```

EPIM

Thank you for you attention

E&P subsurface Domain Responsible

- Kari Anne Haaland Thorsen