Transportation Networks and Hydrography working groups
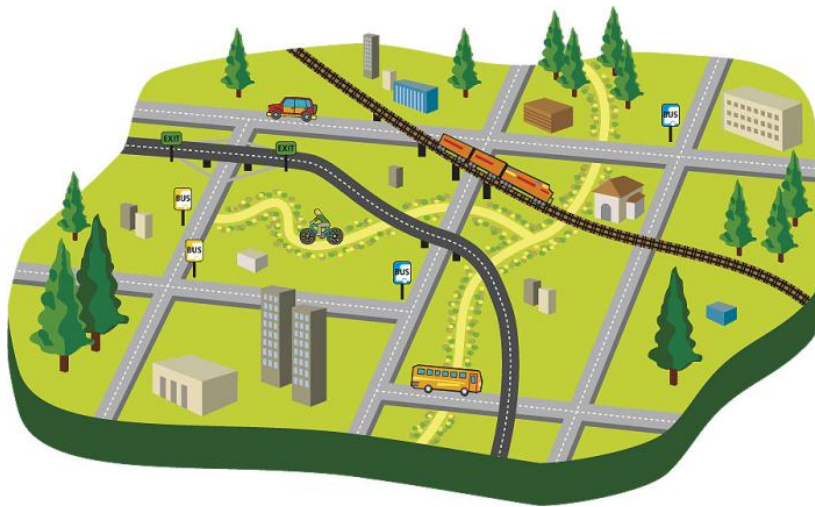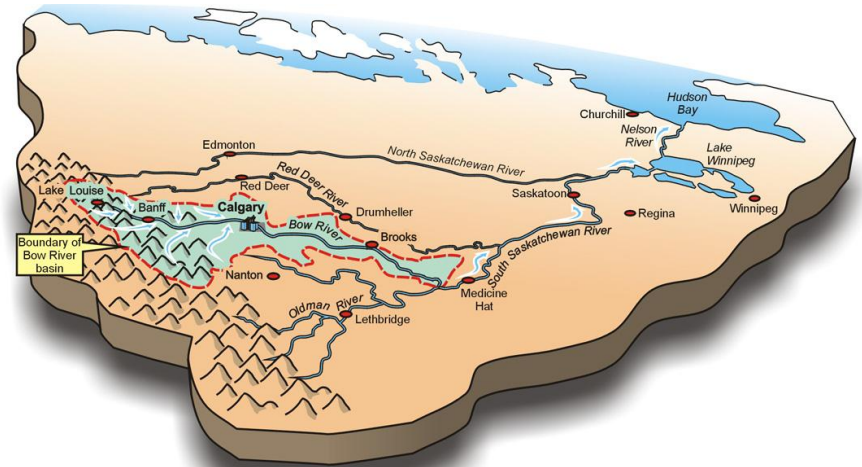
The goal(s) of this meeting

– As you all know, we need to implement the INSPIRE, which by the way inspired the idea for our NSDI.

– That involves providing our National data to EC.

– Data must be in a specific format and to contain specified features and network elements.

– Data must be provided in a reliable and efficient way (through services).

– We have deadlines.

– We are bound by Law.

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Briefly on building an SDI

- **What is an SDI and why do we need it?**
    - A **spatial data infrastructure** (**SDI**) is a data infrastructure implementing a framework of geographic data, metadata, users and tools that are interactively connected in order to use spatial data in an efficient and flexible way (wikipedia).
    - When implemented, it helps to provide a well documented, standardized, projected geographical data accessible through a single access point – the geoportal.
    - The extra benefits include cost savings, better access to the data, higher quality of the data, closer cooperation between the data providers, and more...

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NSDI vs INSPIRE
(in perspective)

N S D I **(all national databases, datasets, thematic data, specific data, imagery, etc. National standards and reference frame.**
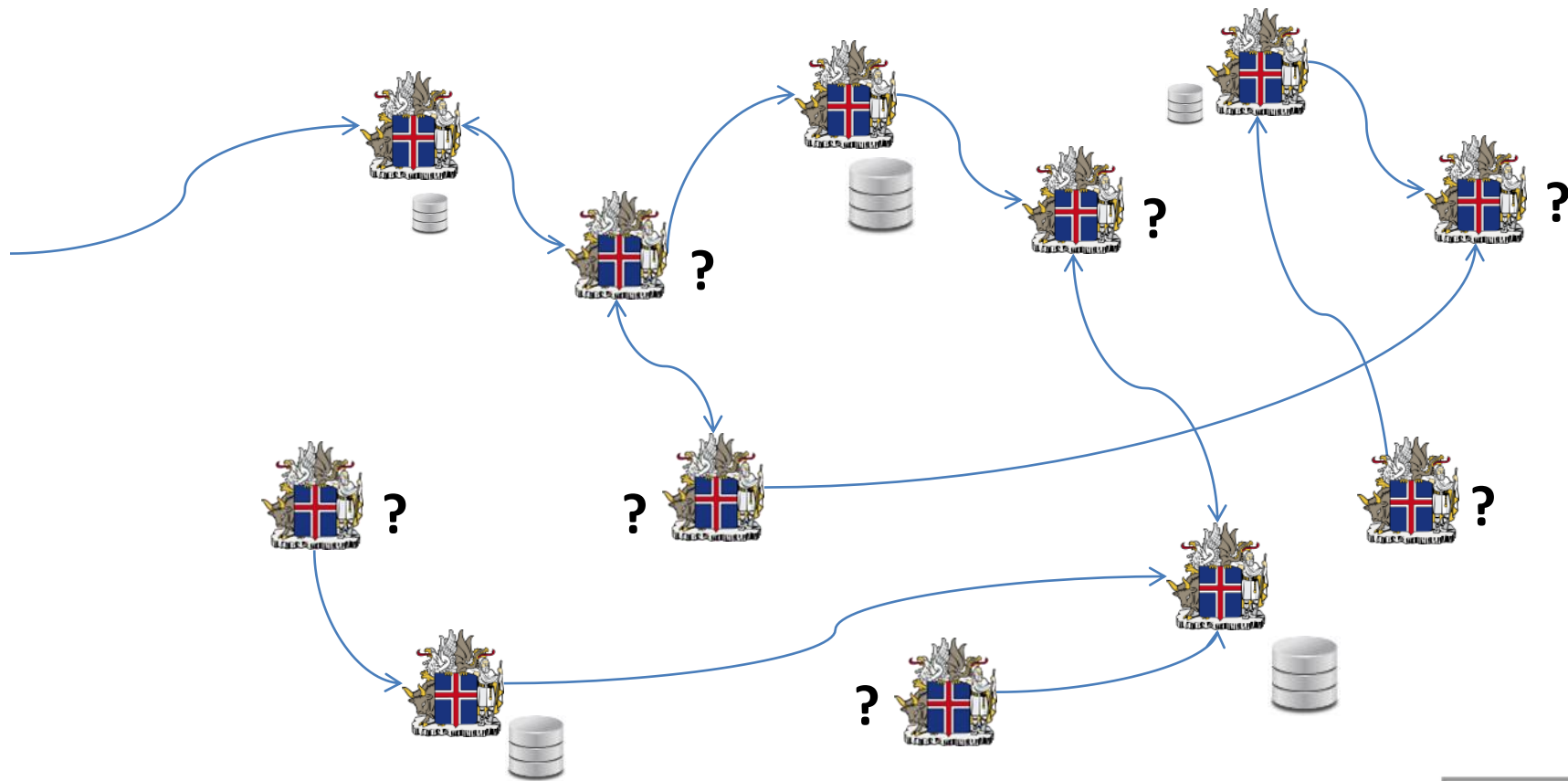
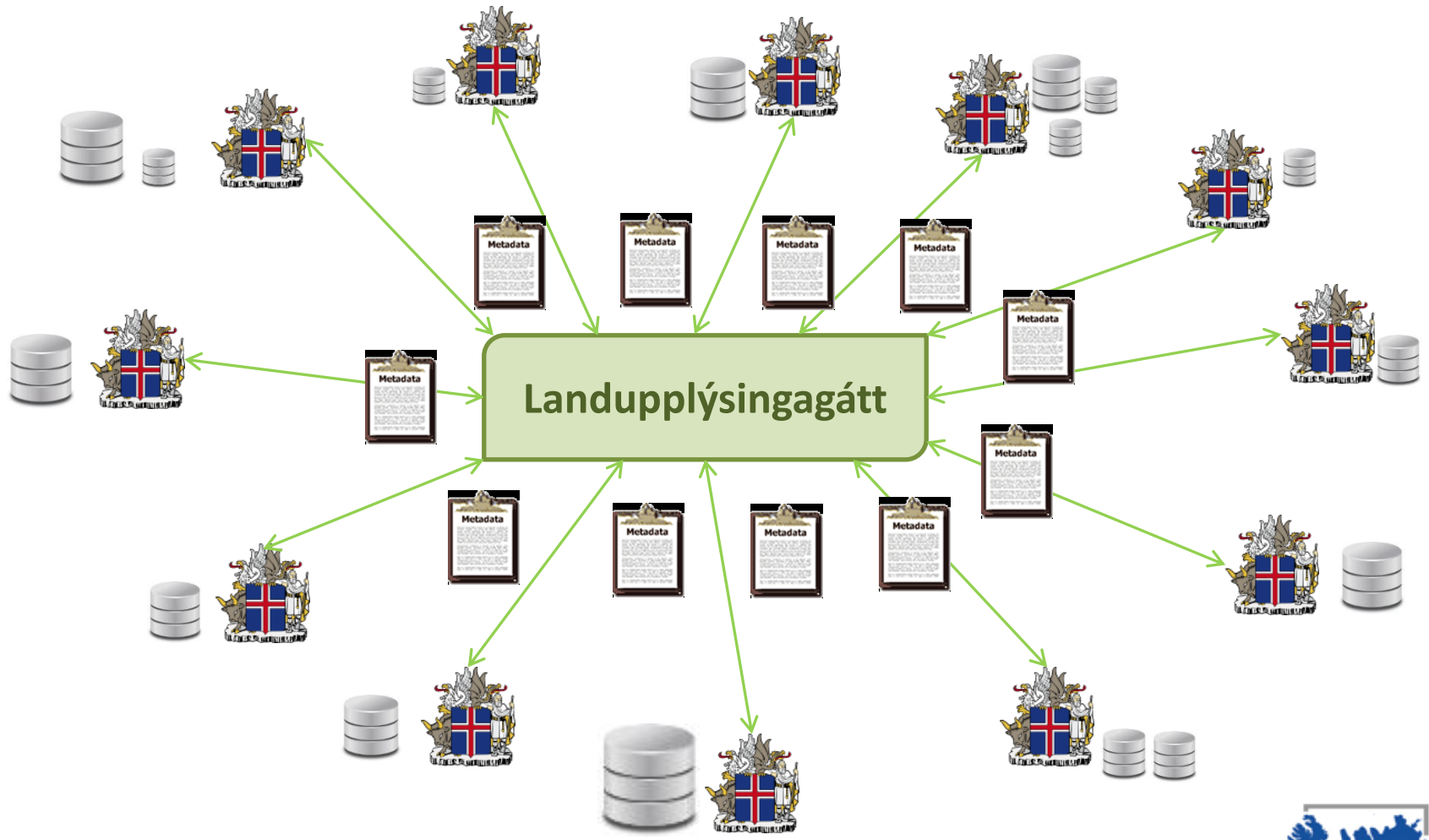**INSPIRE (one reference dataset per** *required* **theme. Specific standards)**

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So where do we stand now?

From deficient...

… to efficient

Landupplýsingagátt

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And that's exactly what we are going to do…

- Allocate resources within each institute
- Already made priorities on INSPIRE Annex I themes
- Established working groups
- INSPIRE requirements for Hydrology and Transportation Networks presented
- Need input on data availability (as per INSPIRE requirements) from all members.
- Make conclusions on data availability, creation of new data, data exchange between institutes, maintenance and so on.
- Will provide assistance on integrating and transforming the data into INSPIRE standard.

INSPIRE requirements and data contents

Transportation Networks

Abstract: „*The transport component should comprise an integrated transport network, and related features, that are seamless within each national border. In accordance with article 10.2 of the Directive, national transport networks may also be seamless at European level, i.e. connected at national borders. Transportation data includes topographic features related to transport by road, rail, water, and air. It is important that the features form networks where appropriate, and that links between different networks are established, i.e. multi-modal nodes, especially at the local level, in order to satisfy the requirements for intelligent transport systems such as location based services (LBS) and telematics. The transport network should also* support the Referencing of *transport flow to enable our navigation services.*"

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INSPIRE requirements and data contents

Transportation Networks

The scope of the INSPIRE *Transport Networks* Data Product Specification incorporates five distinct transport themes:

• Road transport

• Rail transport

• Water transport

• Air transport

• Cableways

INSPIRE requirements and data contents

Hydrography

Abstract: *„Hydrography in the context of this data specification is involved with the description of the sea, lakes, rivers and other waters, with their phenomena and all hydrographic-related elements.*

For mapping purposes, it includes a representation of physical elements – both natural and artificial. For reporting requirements of EC water-related directives it includes WFD surface water bodies. For spatial analysis and modelling, it includes a topologically-sound network of rivers and canals. "

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INSPIRE requirements and data contents

Hydrography

The Hydrography application schema is divided into three separate application schemas (Figure 1), roughly corresponding to spatial objects needed to satisfy the three main Use Cases:

1. Physical Waters (primarily for mapping purposes)
2. Network model (primarily for spatial analysis and modelling)
3. Management and Reporting units (primarily for WFD reporting)

Interactive INSPIRE data models for Transportation Network and Hydrography

– Transportation Network

http://inspire-twg.jrc.ec.europa.eu/data-model/approved/r937/

– Hydrography

http://inspire-twg.jrc.ec.europa.eu/data-model/approved/r937/

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Cooperation will be needed!

– Many levels of cooperation will be needed

– This will set a good working practice for other groups and eventually for creation of SDI.

– SDI can only be built TOGETHER!

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So let's start...