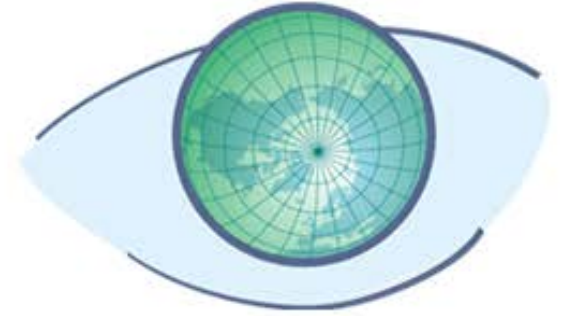




SDI Days 2018*
and
14th International Conference on
Geoinformation and Cartography

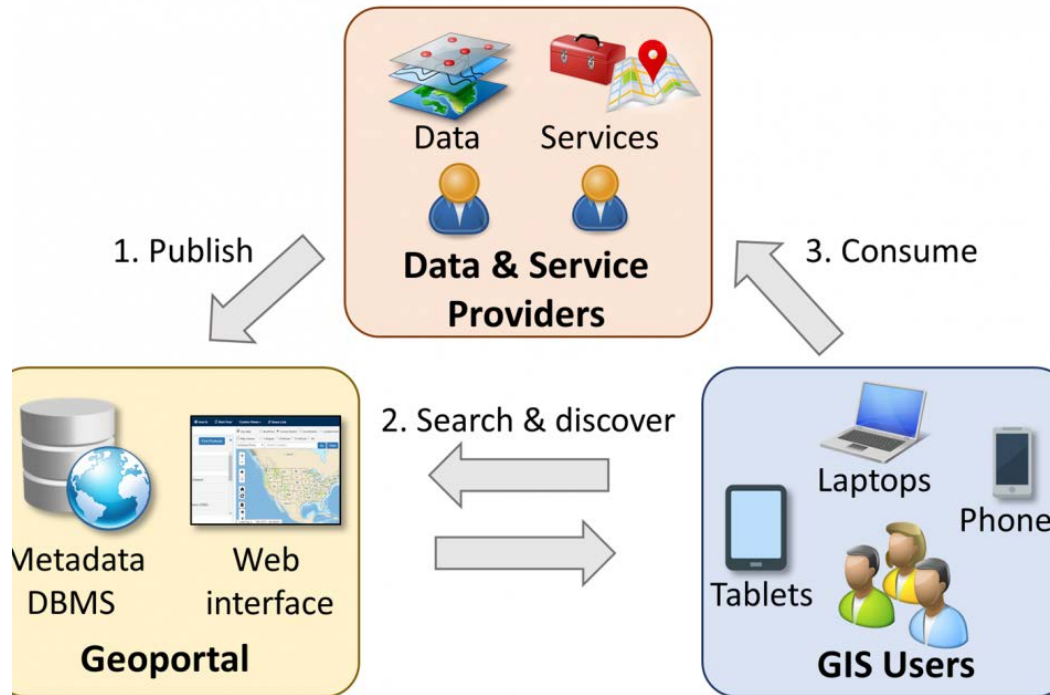


SDI in Life-Long Learning Educational Courses in the Region

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BESTSDI

Usage of SDIs? New hype or part of plan!



Providers & Users SDI paradigm

- **Robots** (binding services into new ones)
- **Humans** (decision making for better life)
 - SDI in the center of a bigger picture
 - SDI to support better decision making
- **Requirements to achieve this goal**
 - Developed **human capacities** with motivation to create better environment for societies
 - What are the **motivations** (**ethics**) of providers and users?

Some SDI enthusiastic & critic viewpoints

Providers

- SDI is so great
- You can do so much with SDI
- SDI will help solve environmental problems
- SDI will be here forever

Users

- SDI is here
- Have invest to evaluate it before using it. Is it best source of data?
- What problems I want to solve?
- How to give back to SDI from using it?

SDI usage challenges – SWOT (subjective)

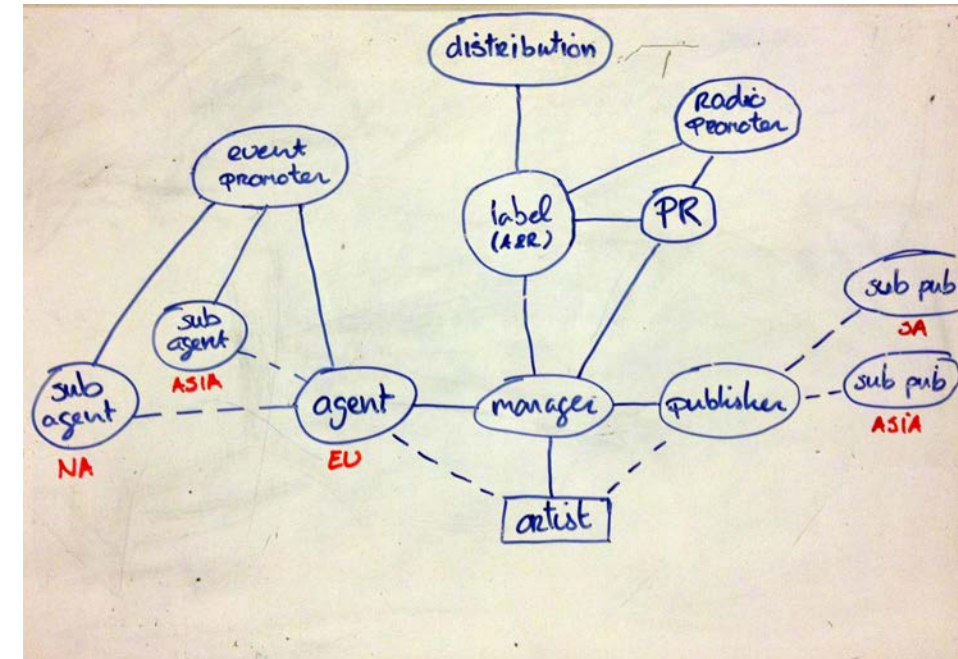
- (S) Has financial and legal drivers (still!)
- (W) Technically demanding – strongly depend on specialization
- (W) Difficult to put all components and processes (people) together (from data to decision process)
- (O) Openness – everyone can participate and question
- (O) Sustainability through step-by-step increase of quality (of data and processes)
- (T) Outdate by new technologies and social inventions (e.g. Copernicus, sensors that can give Annexes data on the fly?)



Understanding SDI „industry“

(metaphore with music industry)

- All people love beautiful music (**listeners**), many people can sing beautifully (**singers**), but not so many can write beautiful new music (**songwriters**)
- How SDI joins together „songwriters“, „singers“ and „listeners“?
- Can we easily find „good songs“ on who, how and why in SDI and „sing“ them for different „listeners“?
- Do SDI „songwriters“ of today depend on „singers“ and „listeners“?



Budi Voogt (2017): Understanding the Music Industry (<https://heroic.academy/understanding-music-industry-music-publishers-synchs-licensing/>)

BESTSDI approach



- Connect **teachers** („singers”) together
- **Explore** SDI arena (past, present, future) („songwriters”)
- **Cover** BEST SDI practices („songs”) and teach („sing”) them to students and **professionals** („listeners”)
- **Ideas and inspiration** cannot be copyrighted, some of „listeners” will turn to „songwriters”
- Evaluating success of BESTSDI is another proces – not part of this presentation



BESTSDI LLL Courses

- Sub-group A – Geodesy and Geoinformatics BESTSDI people
 - Sub-group B – All other study programs BESTSDI people
 - Each sub-group has the objective to develop **three LLL** courses for the **respective groups of professionals** including theoretical and practical learning material as well as methodology for courses execution.
1. SDI Basics
 2. Advanced SDI
 3. SDI Application

Current status

- **Geodesy&Geoinformatics LLL Courses**

- Basic SDI for Providers
- Setting up OGC Web Services (advanced)
- Application?

- **Thematic SDI LLL Courses**

- Basic SDI for Users
- Using Spatial Data and OGC Web Services (advanced)
- Application?

Learning materials



- LINKVIT/GISIG re-use (open to public)

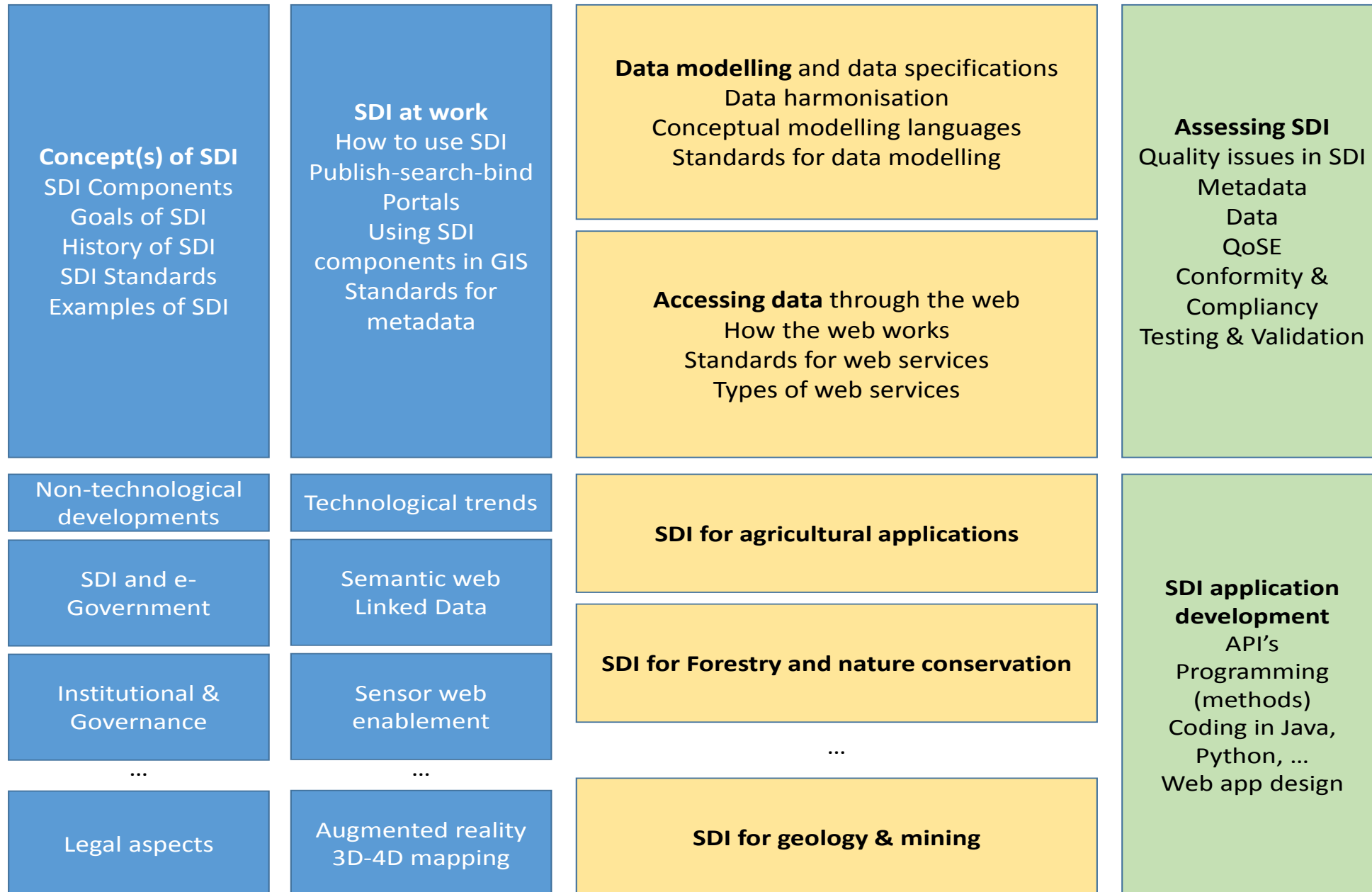


- Learning materials developed for BESTSDI core curriculum (not open to public yet)

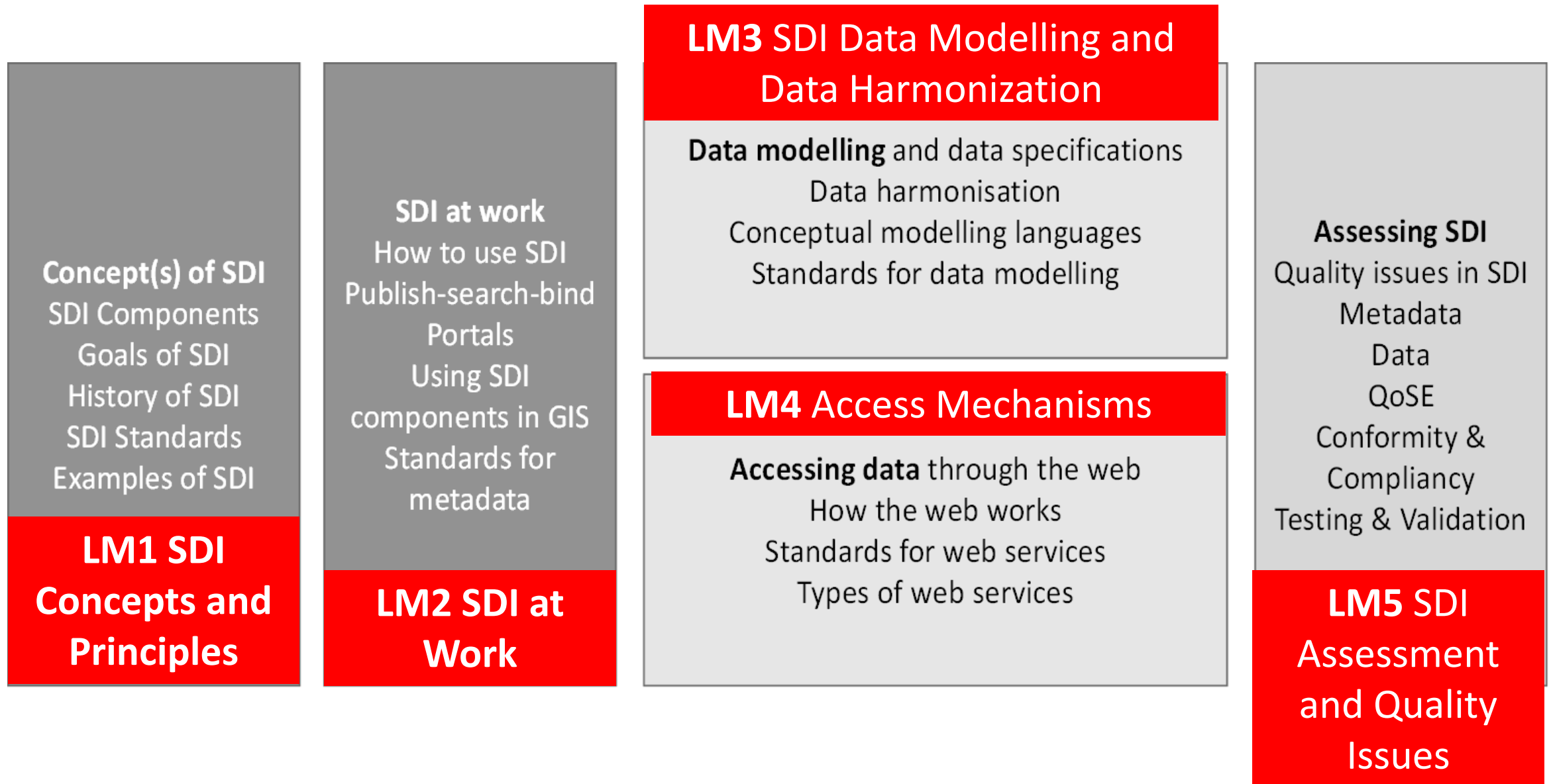
- Other



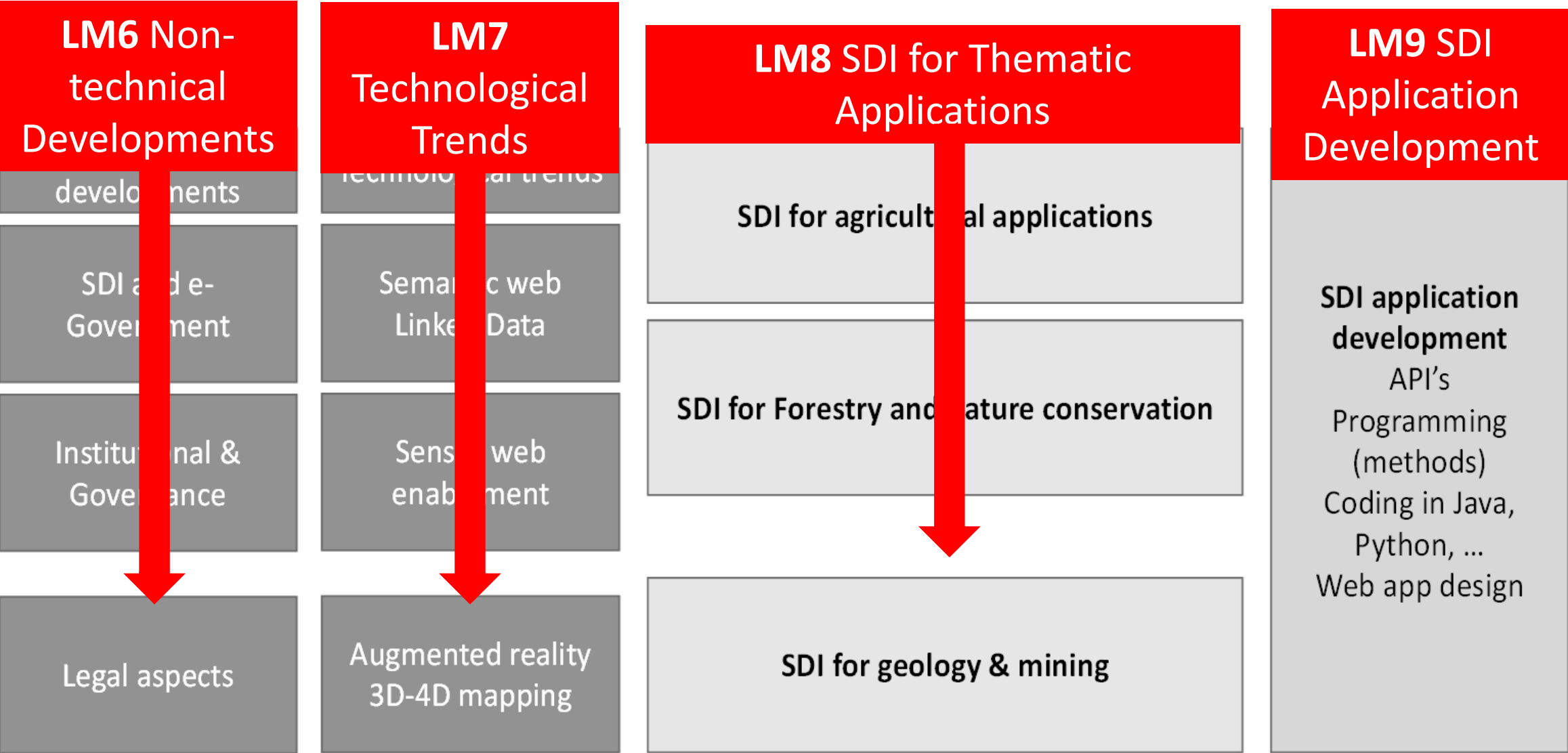
BESTSDI Core Curriculum Building Blocks



Initial SDI Learning Building Blocks



Specialized SDI Learning Building Blocks

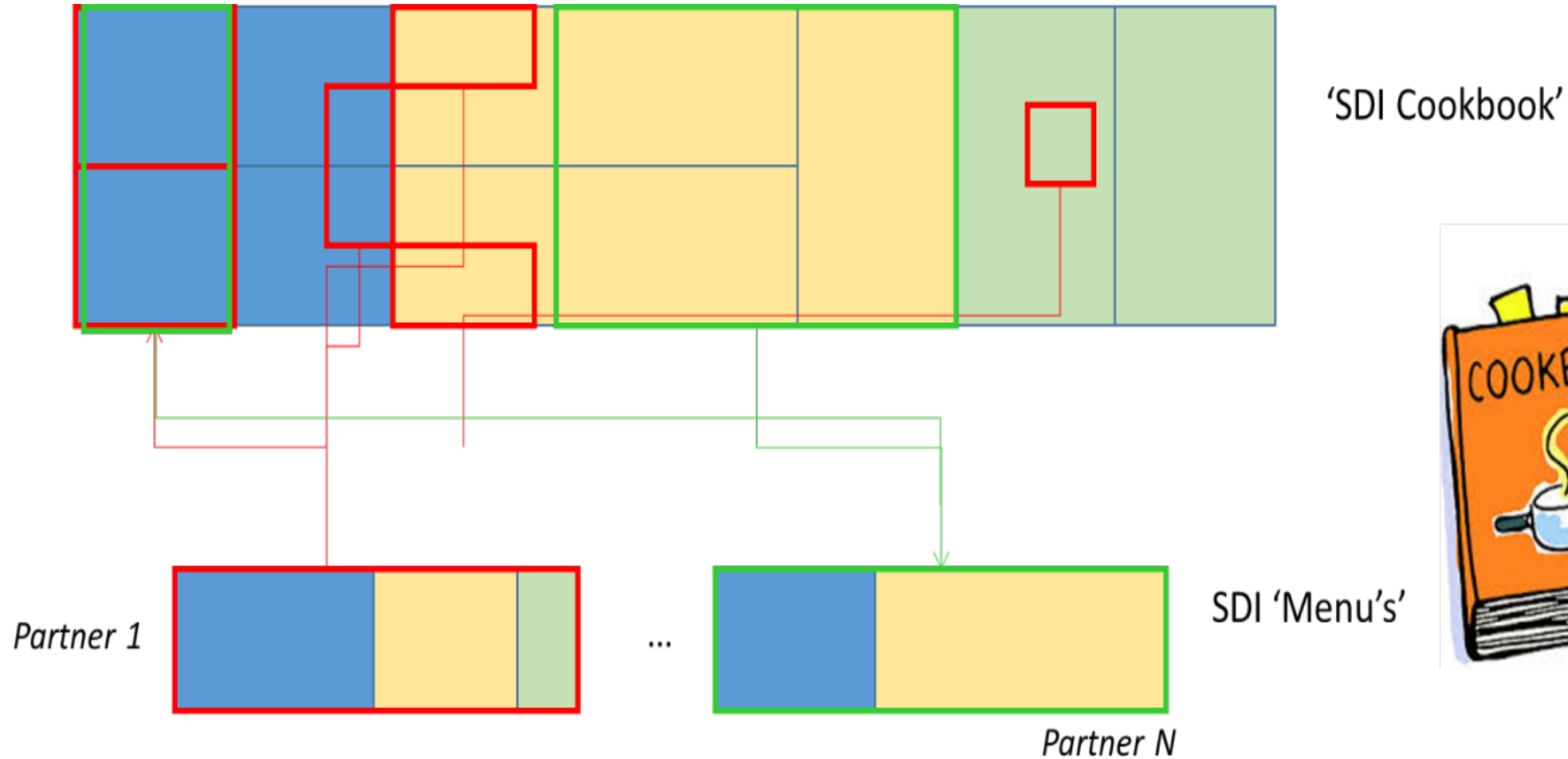


Modules – Topics – Units - Exercises



- 9 modules
- 72 topics
- >150 units & exercises (to be concluded)

Customization and Localization



Example - **Basic** SDI for Providers - Topics

- *Different **components of SDI**: data, metadata, access mechanisms, standards, people and organisations, institutional and legal aspects (LM1)
- *Different **types of SDI** and different models: hierarchical or network based, connecting distributed resources (LM1)
- Main **geospatial standards**, the standardisation process and relevant standardisation bodies (LM1)
- Introducing the **publish-search/find-bind paradigm** by using single points of access (portals) to distributed data and services (LM2)

Example - **Basic** SDI for Providers - Topics

- The **role of metadata in SDI**, the different types of metadata (discovery, evaluation and usage) and the standards they are built upon (ISO 19115, ISO 19119 and ISO 19139) (LM2)
- The role of **catalogues and catalogue services**, and the concept of harvesting catalogues (LM2)
- What is **Quality Assurance** in the context of SDI's and how does the quality control process work (LM5)
- Methods for **testing and validating harmonized data** against data specifications including examples (LM5)

Example - **Basic** SDI for Providers - Topics

- Explaining and analysing **examples of product specifications** and INSPIRE data specifications in particular (examples to be chosen depending on the field of interest) (LM3)
- ***Authoritative spatial data** and official registries and/**versus volunteered geographic information** and crowdsourcing (LM6)
- Detailed overview and comparison of **relevant European (and national) legislation** with regard to GI and other public sector information: INSPIRE, PSI, Aarhus & Access
- ***Overview of the major developments and trends** as defined by UN-GGIM and OGC (with focus on technological trends) (LM7)

SDI LLL in action during 2018/19 - Croatia

- GDPR and Spatial Data
- SDI in surveyors' daily workplace
- Concepts and components of SDI (BESTSDI)
 - INSPIRE Directive (BESTSDI)
 - Spatial Data Web Services (BESTSDI)
 - Using Web Services in GIS and Web Maps (BESTSDI)
- Setting up Web Services (BESTSDI)
- Copyright and Licences, Privacy and Ethics

LLL in Region

- BESTSDI partners created/will create its own LLL offers to local communities
- Work in progress
- Evaluation at the end of project cycle
- Modification of core curricula and LLL courses
- Ensuring continuation (sustainability)



Thank you for your attention!

www.bestsdi.eu