Good to „see“ you all !!
We will be starting soon …..but before that…..

The session will be recorded, if you don’t agree, keep your camera off or just watch the recording that will be made available via TUEWAS YouTube channel afterwards

Kindly let us know where you are based and your project/function

If your connection allows, feel free to keep your camera on during the discussions

Please keep your microphone muted unless you are speaking

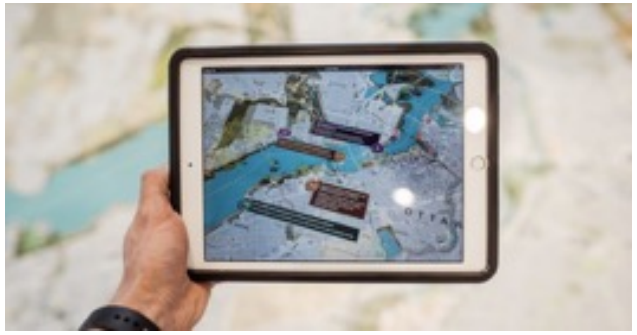
If you have a question or comment, please post it in the chat or

In the Q & A session you can also virtually “raise your hand” via MS Teams

Learning Lab
Digital tools for urban managers and planners

Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

20 June 2022, 9:00 – 11:00 CEST



Competence Centers Democracy, Digital Governance, Urban Development and Digital Societies of the FMB

Working Group eGovernance and Digitalisation

Transformation - Urban Opportunities - Climate Change (TUrbOCliC)

Cross-sectoral group of the TUEWAS and SNGA network of GIZ

With special thanks to SUD-SC II project

Programme

1. Welcome
2. Setting the scene and activation – Stories of Learning
3. Inputs & Joint discussion
    1. **Lessons from TOSCA: Toolkit for Sustainable City Planning & Analysis** - Sumana Chatterjee and Nina Graefenhahn
    2. **Meaningful and inclusive (digital) participation in urban planning and management: Not without PartiCipate!** - Lisa Hiemer-Maqoma
    3. **Remote Sensing and Geographical Information** - Gunnar Hesch
4. Crowd mapping and categorizing digital tools together in an interactive format
5. Input about IT-procurement – **what to consider when purchasing digital planning and participation tools and where to find help** - Anne Doose

Welcome

Mohammad Ishtiuq Hossain
(Senior Advisor, ACCNLDP II, Bangladesh)

WG Speaker SNGA

Sebastian Markart
(Cluster, Climate Smart Cities Project, India)

WG Speaker TUEWAS

Mahmudur Rahman
(AV, ACCNLDP II, Bangladesh)

WG Speaker eGovernance & Digitalization, SNGA

Anne Doose
(Senior Advisor for Digital Governance, FMB)

eGovernance & Digitalization WG Tandem Partner

Charlotte Pusch
(Advisor SUD-SC, India)

Co-initiator of the learning lab

Luci Maia
(TUrbOCliC Consultant)

Good bye and thank you to Vaishali

- Vaishali has been member of the network since 2009, as a speaker since 2015, a strong and committed advocate for the topic. She is of course staying part of our group but handing over speaker responsibilities.
- We want to say thank you so much and keep up your amazing work, dear Vaishali...

Who else is here with us today.....a big thanks already! :)

Sumana Chatterjee

Technical Expert - Sustainable Urban Development – Smart Cities

Nina Graefenhahn

Advisor - Sustainable Urban Development – Smart Cities

Lisa Hiemer-Maqoma

Advisor for Digital Governance in the Competence Centre Democracy, Digital Governance and Urban Development

Gunnar Hesch

Advisor for geospatial data in the Digital Societies Competence Centre

Setting the scene

- Transformation – Urban Opportunities – Climate Change (TUrboCliC)
  - Cross-sectoral working group – TUEWAS and SNGA
  - Strong portfolio in India, Bangladesh, but also Nepal, Indonesia, China....active since 2009, working on the interface of governance, planning, services, participation & environment, climate change, infrastructure.
  - Digitalisation as one important topic, looking forward to strengthening collaboration with:
- Sustainable Urban Development – Smart Cities
- E-Governance and Digitalisation working group within SNGA
- FMB and other experts / interested colleagues

Digital sprint on user-centred digital solutions

Digitalisation-related past initiatives:

Compilation and analysis of digital solutions for climate-resilient and low-carbon urban development

Data-base of selected climate and Covid-19 related ICT/digital tools and solutions at the local level

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Activation

Results in miro

- YOUR TASK: write, draw or visualize your story of Learning
  - Steps:
  - Take a post-it in any colour of your choice
  - Think for a moment: your most significant lessons learned/story regarding digital planning or management: what has worked? What hasn't? Why?
  - Write down or visualize the story
  - Feel free to share your story afterwards

https://miro.com/app/board/o9J_IrYpyE0=/

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Lessons from TOSCA: Toolkit for Sustainable City Planning & Analysis

(Interactive Urban Development Tools)

earlier Cityscope/ OCTIP

Sustainable Urban Development – Smart Cities II

HCU HafenCity Universität Hamburg

City Science Lab
A Cooperation with the MIT Media Lab

german cooperation
DEUTSCHE ZUSAMMENARBEIT

Implemented by
giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

giz

Urbanisation and Data: missing linkages

- Current rate of urbanisation– poses **urban planning and governance challenges→ impact quality of life** of citizens
- **Limited availability of standardised/real time spatial and attribute data at city level → challenges sustainable development of cities**

Approach

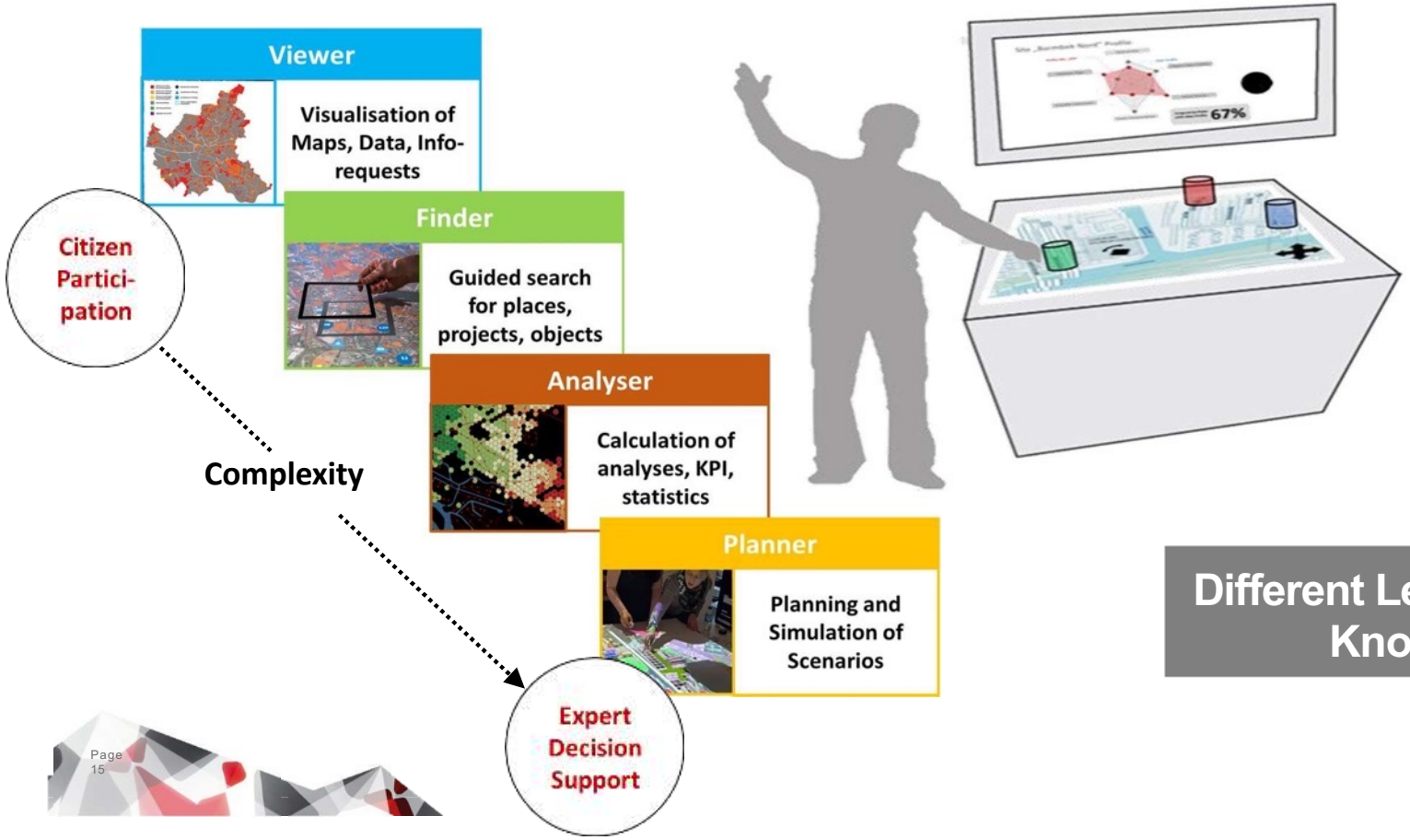
- Develop digital **system that integrates** different **layers of information for informed decision making**
- Meet aspirations of stakeholders using **interactive and participatory planning** tool

TOSCA: an introduction

- **Decision Support System,** jointly developed by the City Science Lab HafenCity University (HCU), Germany and MIT Media Lab, USA
- **Interactive digital tool** that helps to **analyse urban relationships**, simulate development ('what-if') scenarios using **spatial and attribute data** to develop optimal/sustainable solutions in urban planning
- **Visual feedback on potential impacts** of proposed developments by **using multifunctional relationships**
- Developed using **open-source (GRASS-** *Geographic Resources Analysis Support System***)**
- **Participatory planning** for all key stakeholders to **find acceptable solutions**

Idea: Toolbox

Toolbox

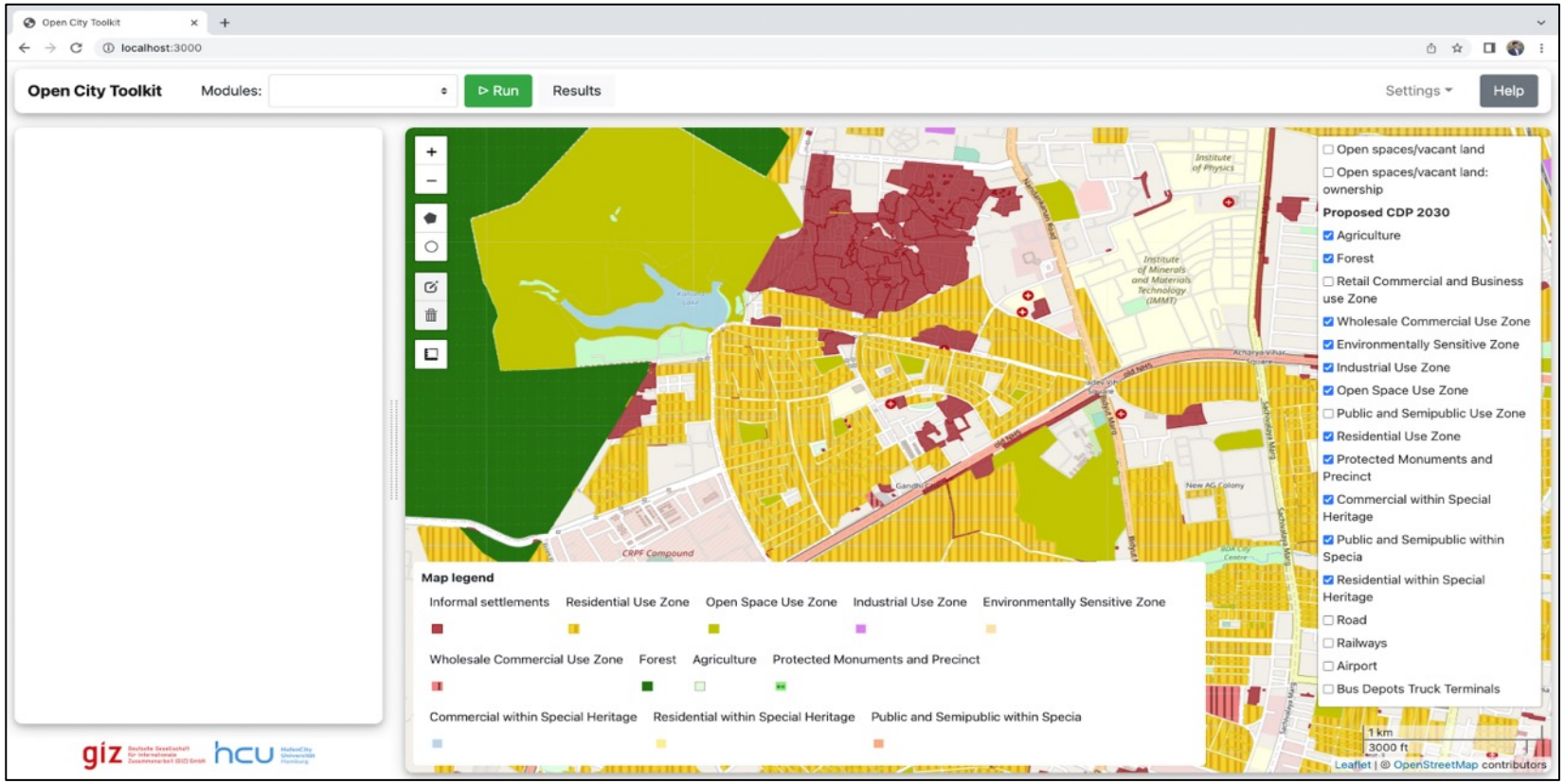


Different Levels of Knowledge

Bhubaneswar, India

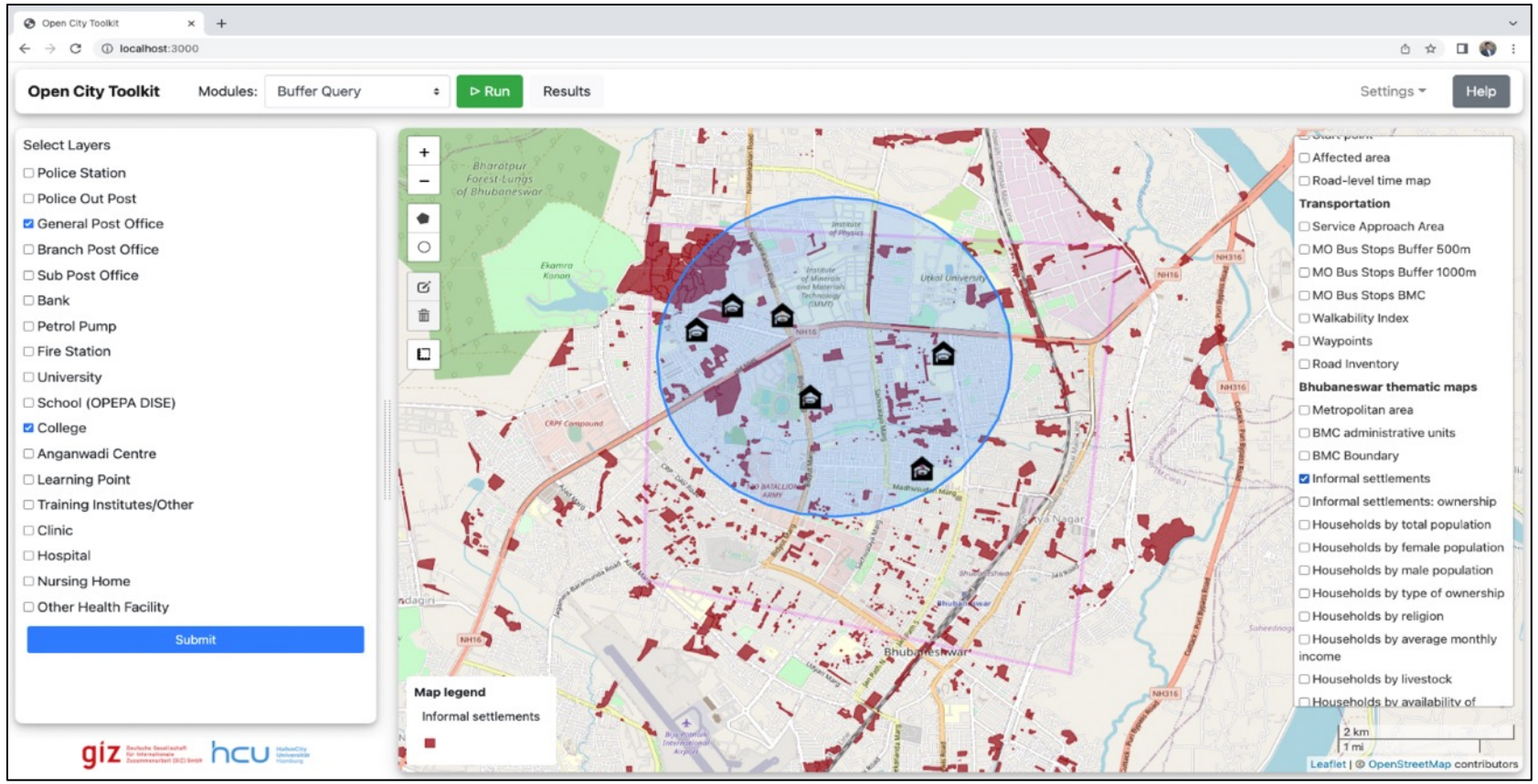
Examples of use cases with TOSCA

Use Case #1: Land ownership in slums



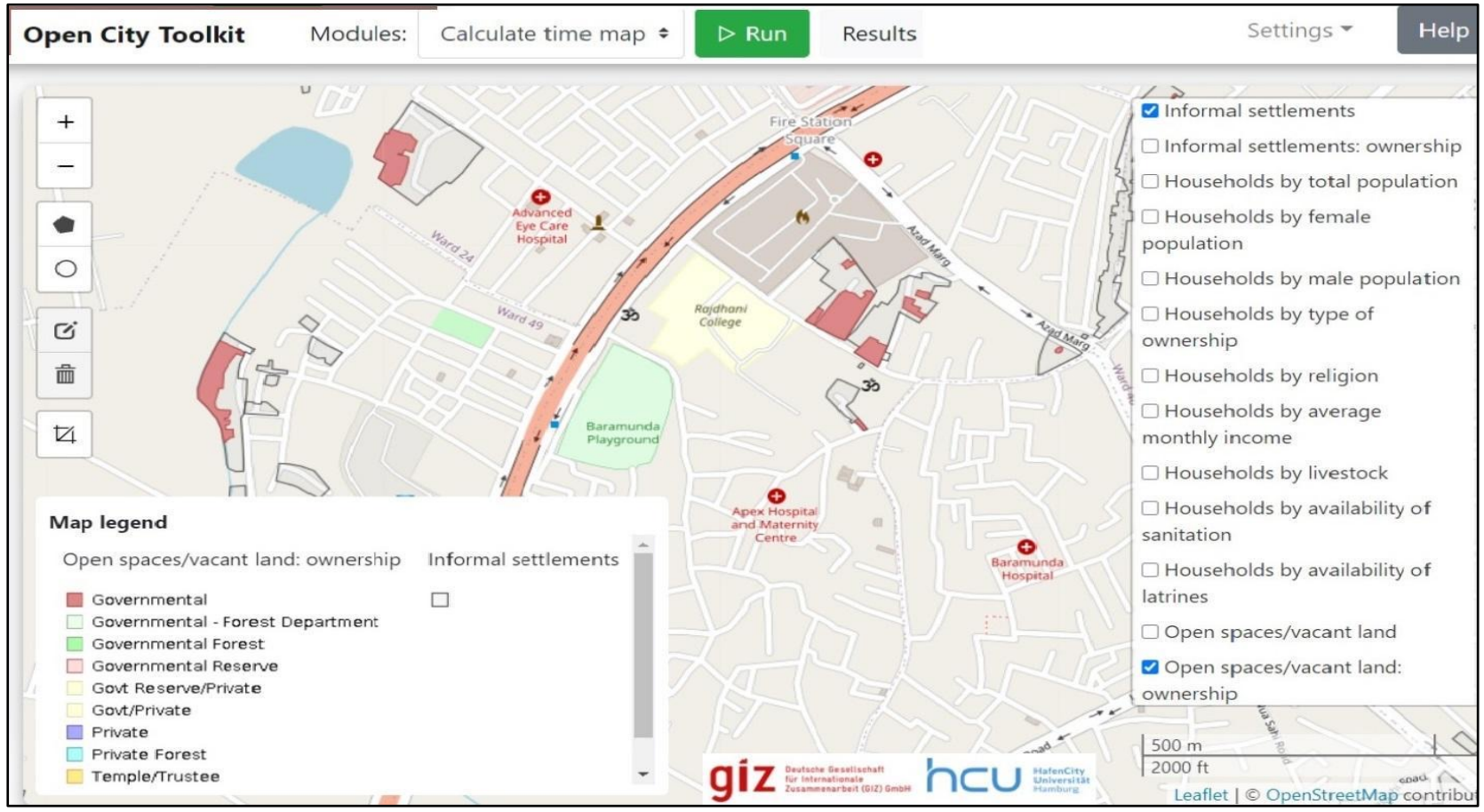
The characteristics of slums (land use, land ownership) in the city was studied and mapped to aid in slum relocation planning. ‘Layer overlay’ module was developed to help users locate the settlements by the land ownership type and compare it with the existing situation with respect to the proposed land use development.

Use Case #2: Access to public amenities in and around slums



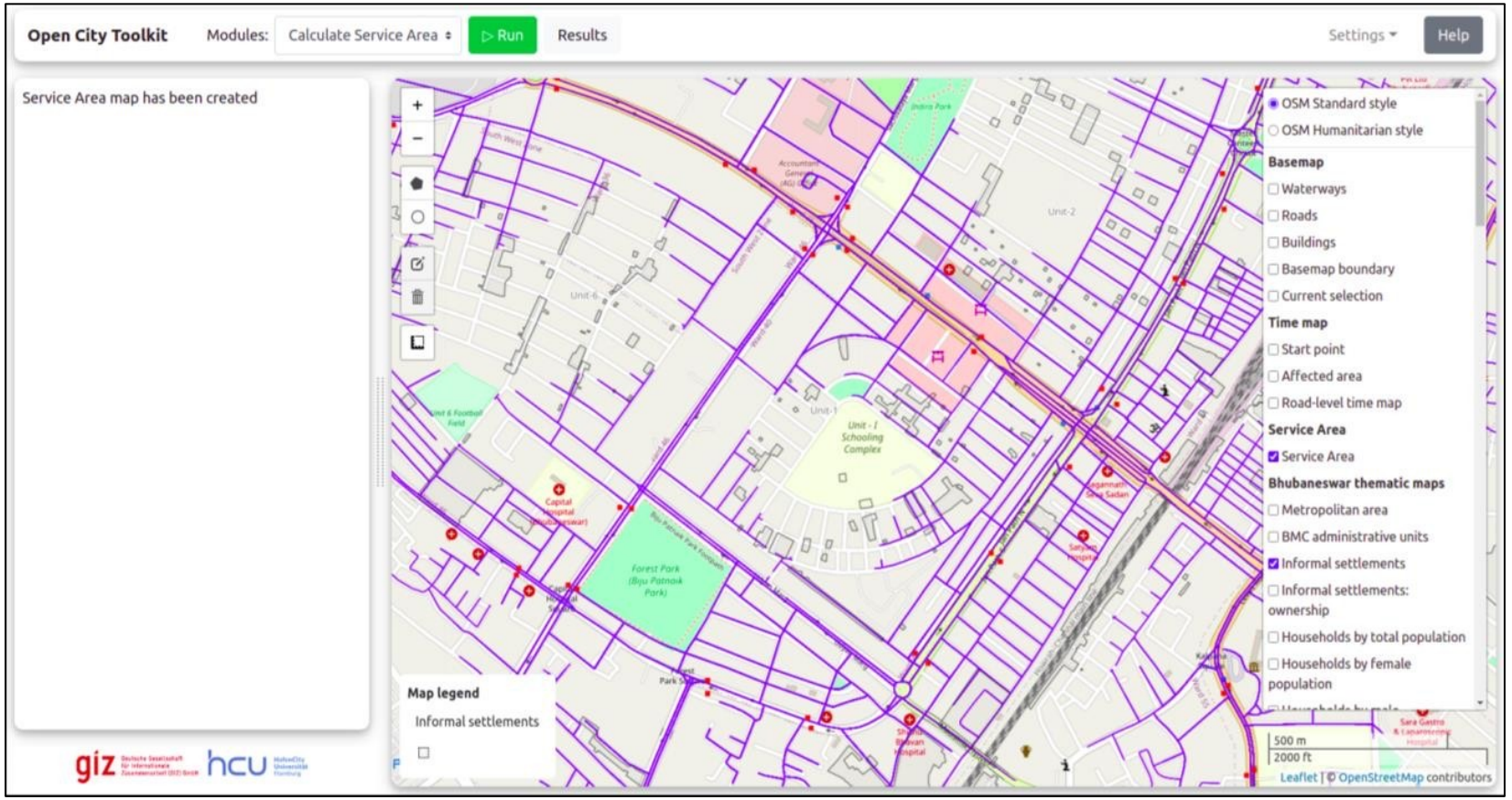
The types and number of public amenities/facilities present within a walking distance from the informal settlements (viz., health care facilities, education institutions) was assessed to aid in addressing the demand-supply gap with further plan provisions. Both ‘Layer overlay’ and ‘Buffer’ modules were developed to locate the selected Points of Interests (PoIs) in the slums.

Use Case #3: Identification of housing relocation sites for slums



Decisions on slum rehabilitation in affordable housing sites, involve a detailed analysis on site selection for better planning, in order to ensure inclusivity of existing socio-economic ties of slums in the relocated sites. In this use case, Layer overlay and Time map modules were used to identify land ownership wise nearest available/ suitable vacant sites for the slums.

Use Case #4: Accessibility mapping to public transport bus stops



The coverage of public transport in the city was examined for better planning of bus stops and routes and to find settlements that are not serviced by the existing public transport system. A new module 'Service Approach Area' (SAA) was developed to support planning of public transport based on population distribution, network analysis (service area) among others.

Learnings

What worked well?

- Sustained technical cooperation between HCU in Germany, GIZ and consultant in India
- Cross-project exchange between SUDSC and SUT for the city of Bhubaneswar
- Technical exchange and knowledge sharing with other partner states/ cities for using the tool
- Project documentation on tool development and software design
- Development of video tutorials and user manuals

What were the challenges?

- Repeated change in project leads (GIZ and HCU)
- No face to face partner consultations/ workshops for identification of user needs and tool demonstration
- Denial to partner premises entry; unattended communications
- Discontinued interest of the partners in application of the tool with change in priorities
- Conducting training needs assessment and capacity development of end users
- Institutionalisation/ operationalisation of the tool with the partner department

Ideas to do it better

Use case and module development	Process development and implementation	Capacity development and institutionalization
Kick-off workshop defining use cases with gov. officials at local level	Set up software at institutions	CD strategy for end user
2 new (shared) use cases to be upscaled to other cities	Develop transfer package (human resource plan/ sustainable financial plan)	Develop training modules, Training of Trainers from gov., private sector etc.
3 new analysis modules	Implementation methodology (SOP's) Knowledge dissemination	Linking TOSCA training modules with gov. modules

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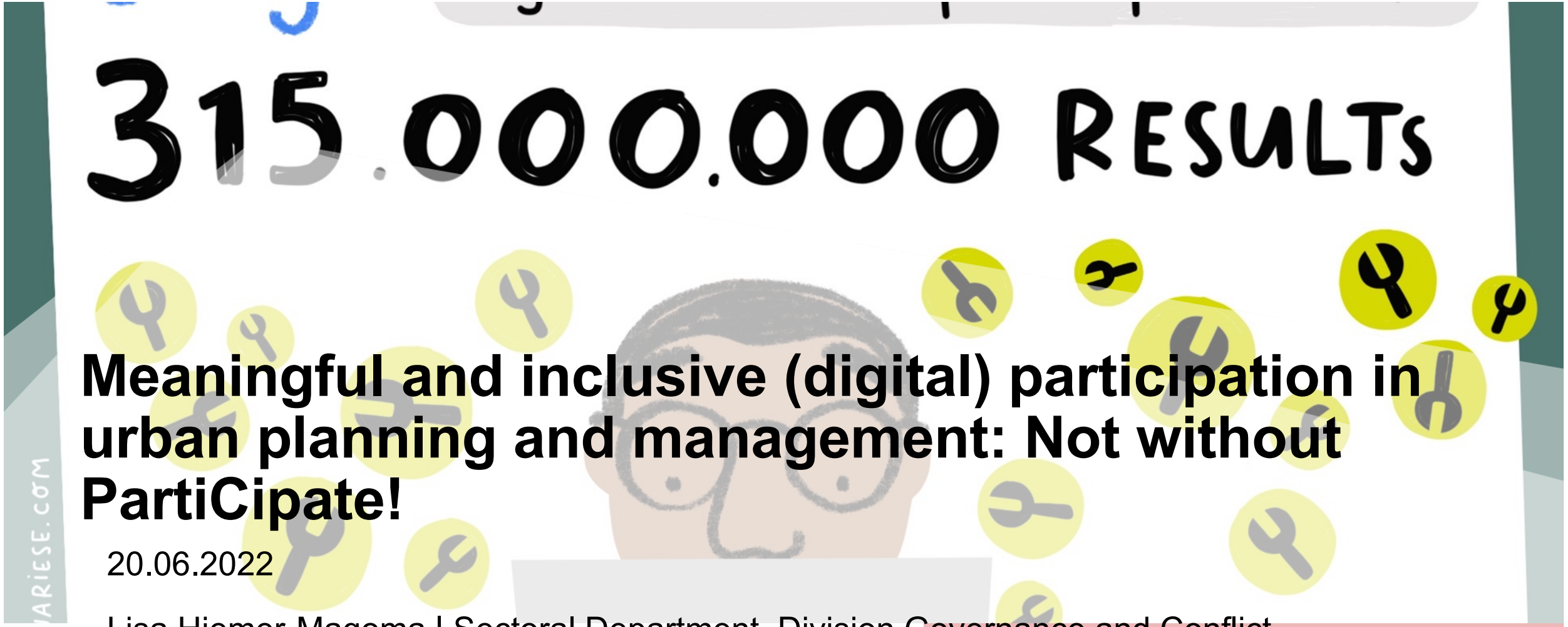


Meaningful and inclusive (digital) participation in urban planning and management: Not without PartiCipate!

20.06.2022

Lisa Hiemer-Maqoma | Sectoral Department, Division Governance and Conflict

giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Objectives

At the end of this short input, you will

1. have a good understanding of some conceptual foundation for meaningful **Digital Participation;**
2. have learned about the tool **PartiCipate**;
3. have reflected on some **potential use cases** of PartiCipate in your (urban planning) project context.

To start with.

Meaningful (digital) citizen participation is NOT about hosting a singular public event or providing an app.

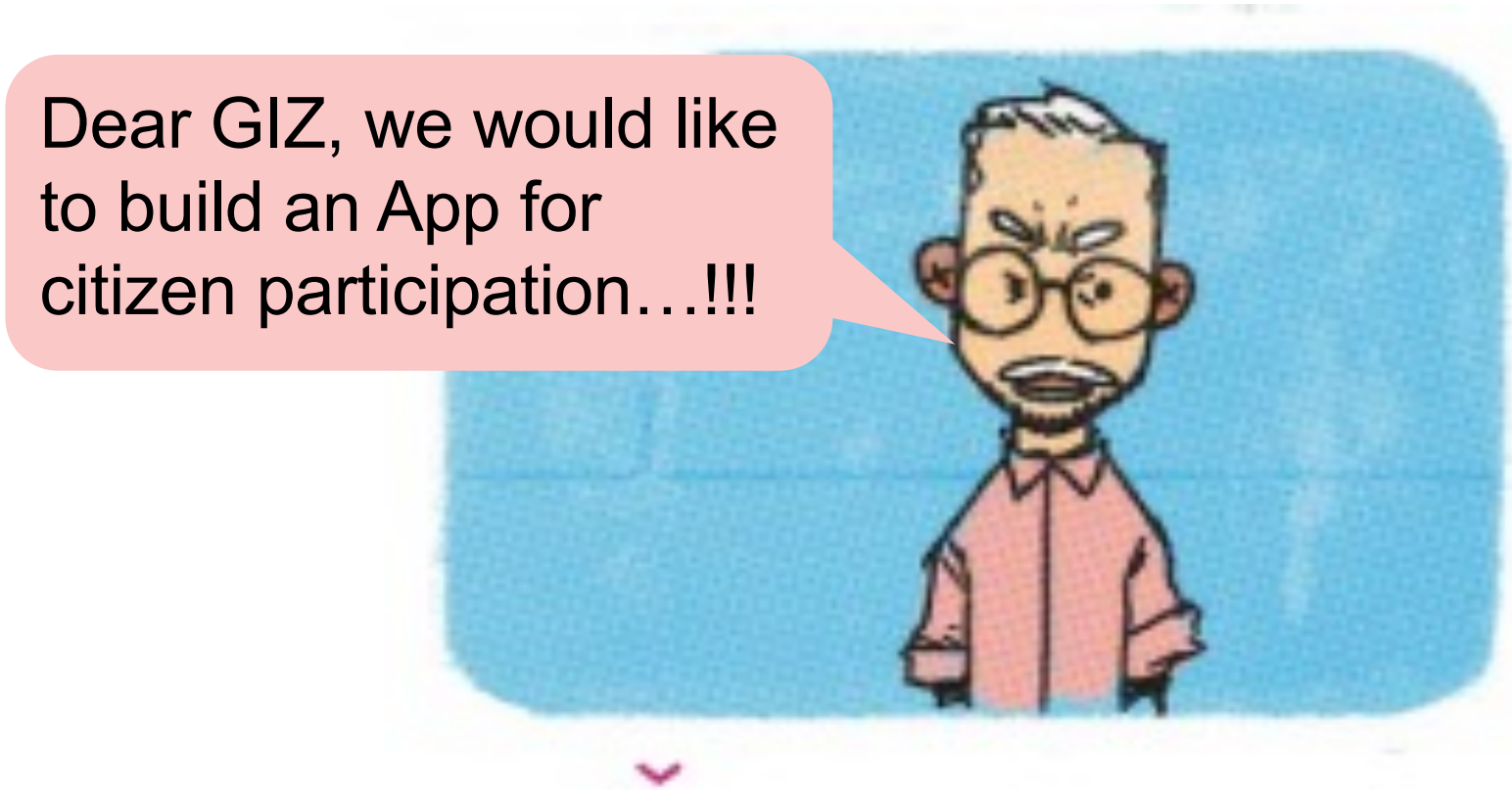
To start with.

Meaningful citizen participation needs resources.

To start with.

Citizen participation is most meaningful when done in a blended manner.

Reality check.



Our combined advisory package

Package 1

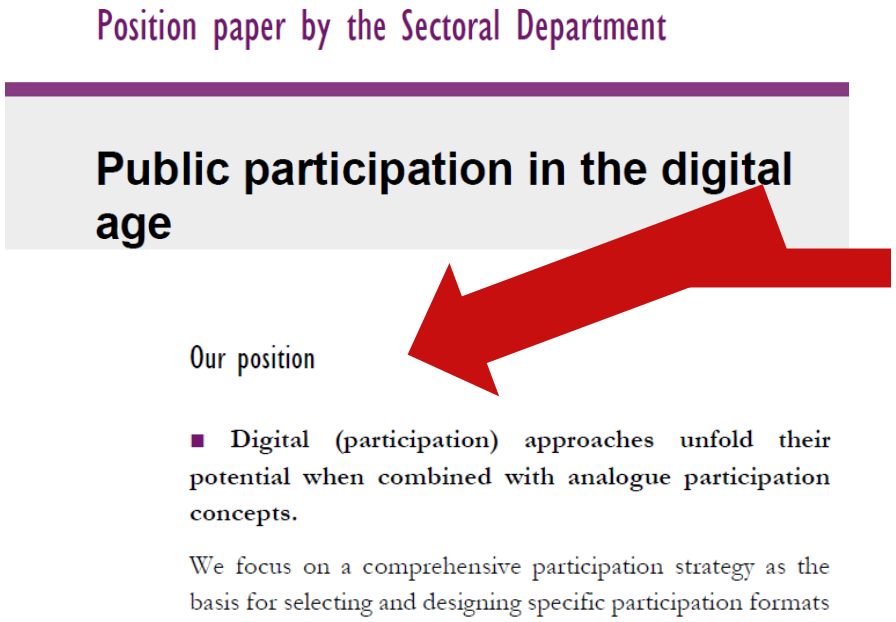
Position Paper „Public Participation in a Digital Age“ with 6 quality criteria for meaningful digital participation

Package 2

PartiCipate – A digital advisory tool to design your participation strategy and choose relevant methods

Package 1 | Position Paper „Public Participation in a Digital Age“

- Re-conceptualising existing concept of constructive state-society relations
- Development of 6 core principles for GIZ advisory services


Position paper by the Sectoral Department

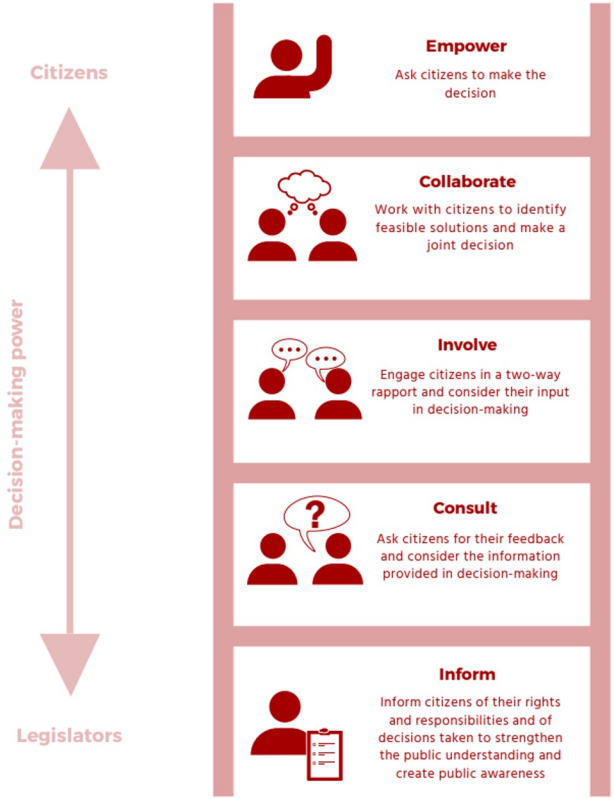
Public participation in the digital age

Our position

■ **Digital (participation) approaches unfold their potential when combined with analogue participation concepts.**

We focus on a comprehensive participation strategy as the basis for selecting and designing specific participation formats

Package 1 | Position Paper „Public Participation in a Digital Age“



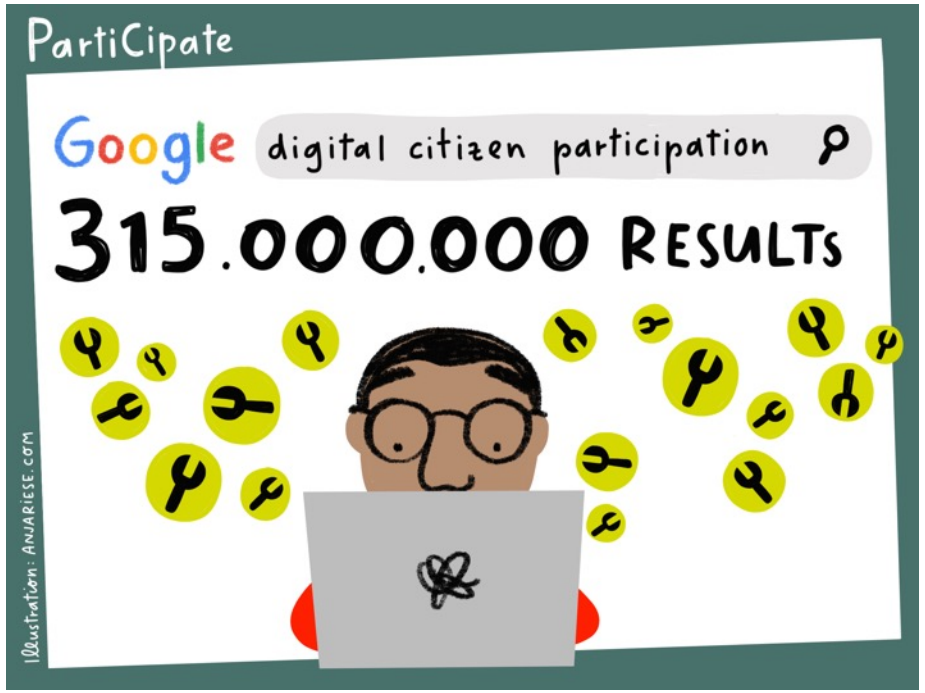
6 Principles

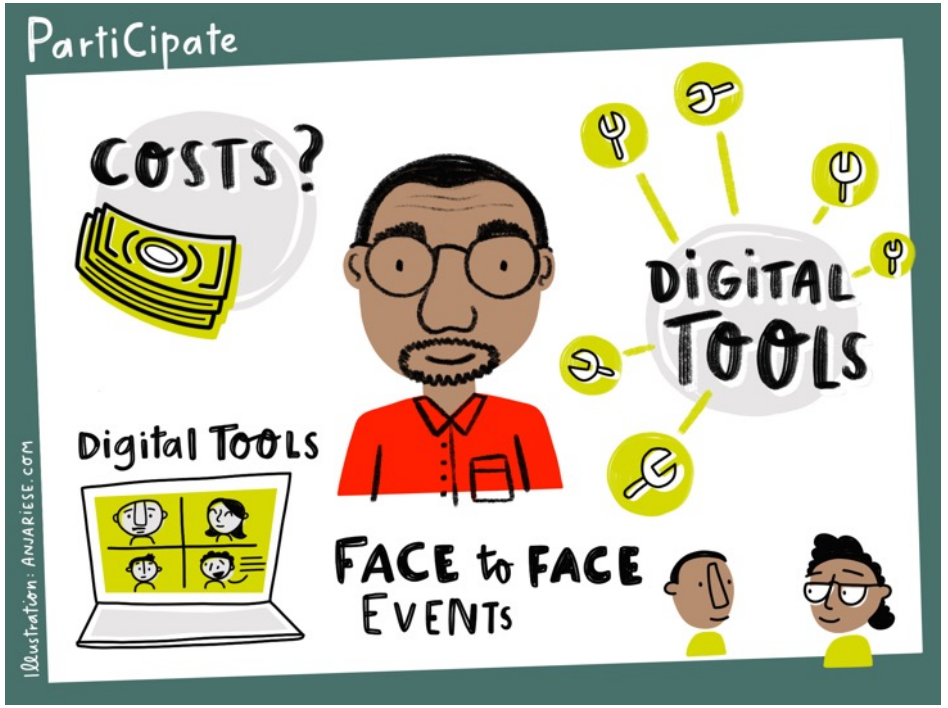
- Blended participation = combine analogue / face-to-face with digital formats
- User-focused approaches ensure uptake
- Strengthening state capacities
- Include a trained moderator to enable constructive dialogue
- Be intentional about which data are necessary to be collected from citizens
- Use potential to improve the feedback loop on participation processes/procedures

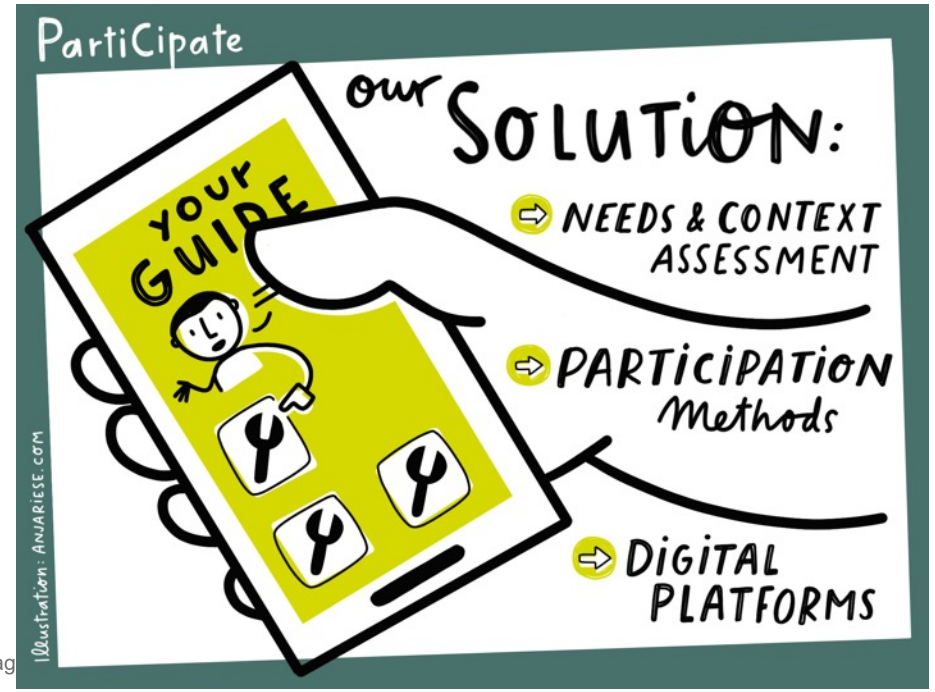
Our combined advisory package

Package 2

PartiCipate – A digital advisory tool to design your participation strategy and choose relevant methods


ParticiPate
Google digital citizen participation
315.000.000 RESULTS
Illustration: ANJARIESE.COM


ParticiPate
COSTS?
DIGITAL TOOLS
Digital TOOLS
FACE to FACE EVENTS
Illustration: ANJARIESE.COM


ParticiPate
our SOLUTION:
YOUR GUIDE
NEEDS & CONTEXT ASSESSMENT
PARTICIPATION Methods
DIGITAL PLATFORMS
Illustration: ANJARIESE.COM


ParticiPate
in less than 10 Min.
Your ADVICE
FREE SERVICE
1 Stop Shop
Illustration: ANJARIESE.COM

PartiCipate

= A **digital One-Stop-Shop** for creating and designing meaningful (digital) participation processes

- GIZ Innovation Fund Winner 2020
- What you get as User:
  - Customized (digital) participation methods and formats depending on your context
  - Information on suitable Open Source Participation platforms

Let‘s Test.

https://participation.digital

Hungry for information on Digital Participation?

Read on

1. GIZ Position Paper “Public Participation in a Digital Age”
2. TOPIC Page Digital Governance and Society
3. TOPIC Page Political and social participation
4. BMZ Digital Agenda
5. BMZ Toolkit Digitalisation
6. Digital Impact Alliance (DIAL) Principles for Digital Development (endorsed by GIZ in February 2018)

Kontakt

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https://www.facebook.com/gizprofile/

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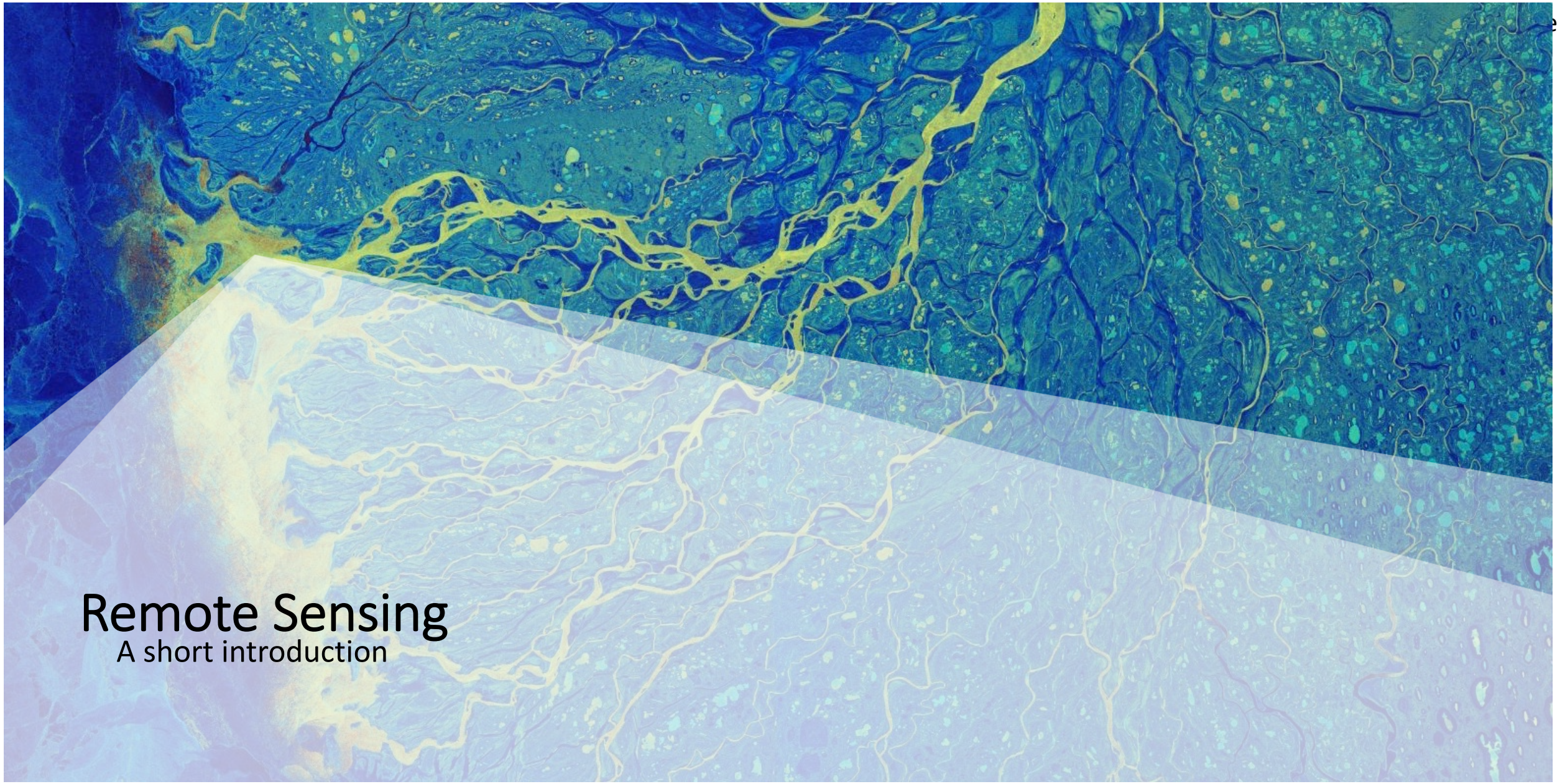
Remote Sensing for Development Cooperation

A short introduction + how to get engaged

Network of Remote Sensing and Geographical Information

giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH


Remote Sensing
A short introduction

1. Relevance of Remote Sensing for SDGs

- Remote Sensing contributes to almost all SDGs
  - Remote Sensing and geospatial information contributes to **progress in targets** of 16 out of the 17 SDGs

e.g. Target 2.c "Adopt measures to ensure the proper functioning of food commodity markets and their derivatives and facilitate timely access to market information, including on food reserves, in order to help limit extreme food price volatility."
→ Real time crop monitoring

  - Directly **measures or supports indicators** for 13 SDGs

e.g. Indicator 3.9.1 "Mortality rate attributed to household and ambient air pollution."
→ Particulate matter measurement for every place on earth

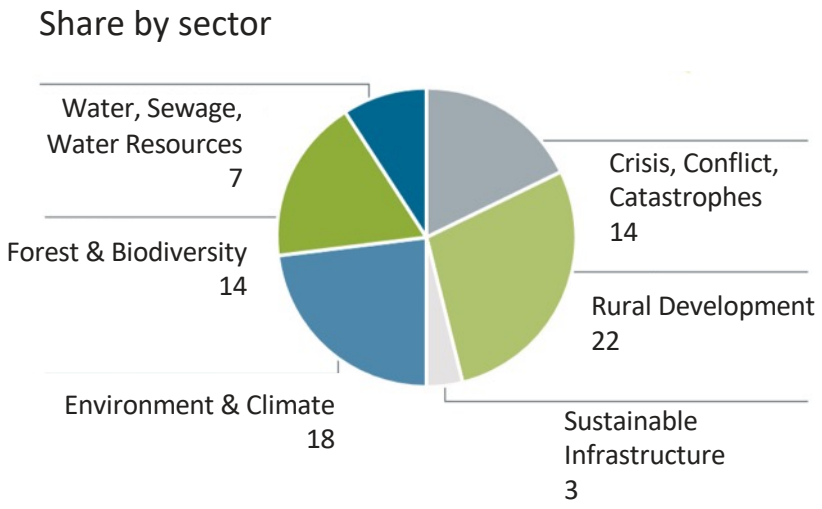
- Only large-scale data solution for many indicators (e.g. forest related data)

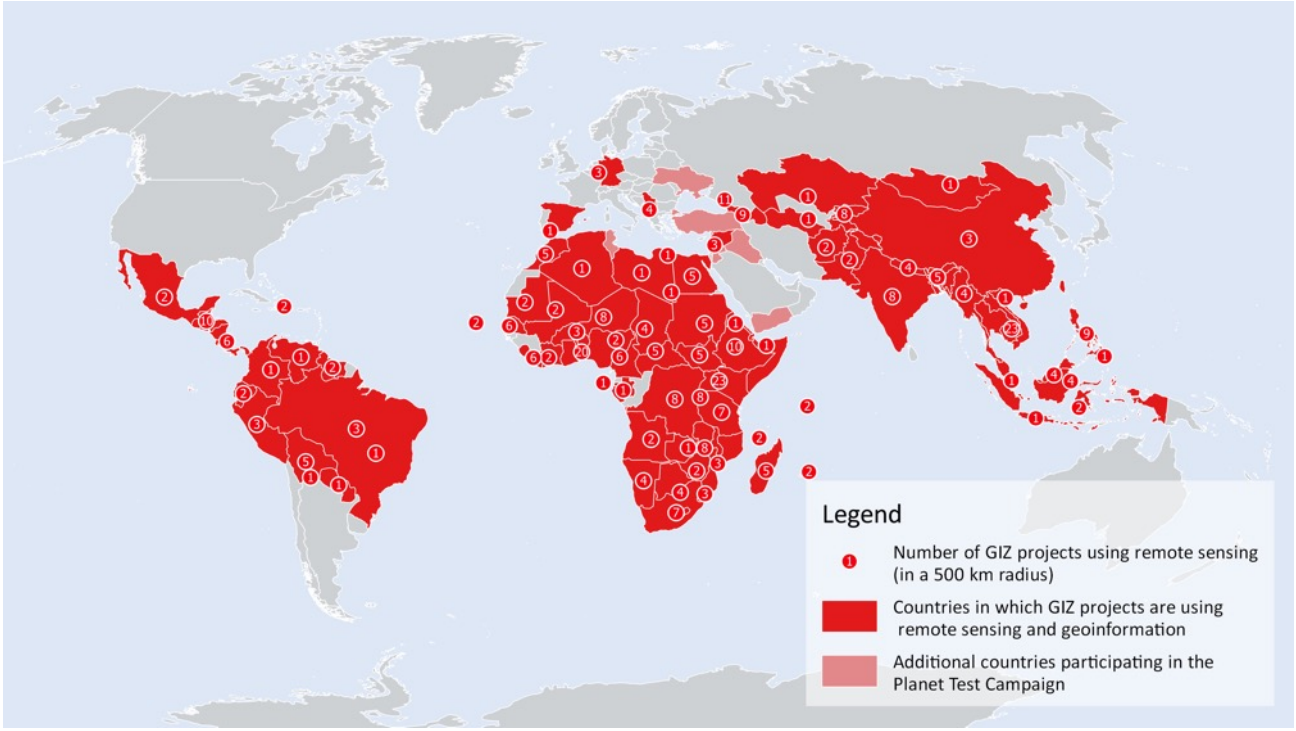
- Alternative for measuring progress in data-poor regions

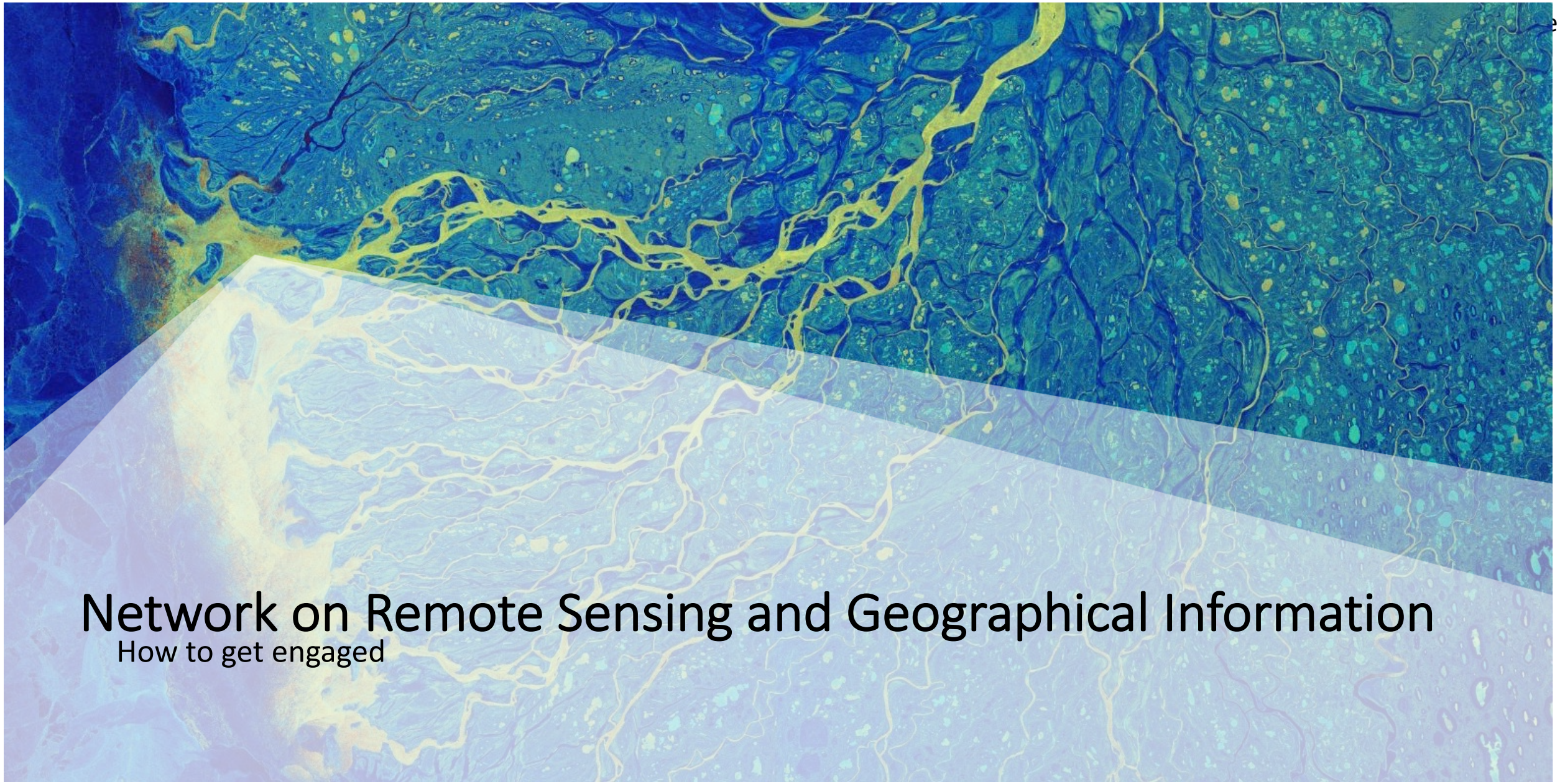
(Figures: Group on Remote Sensings 2017 - Remote Sensings in support of the 2030 Agenda for Sustainable Development)

1. Relevance of Remote Sensing within GIZ

- Around 80 projects at 130 sites use EO and Geographical Information.
- Most important sectors:
  - Rural development
  - Environment & Climate
  - Forest & Biodiversity
- **The expert network aims to facilitate exchange among existing projects within GIZ and to external experts as well as guidance for newly established projects.**







Network on Remote Sensing and Geographical Information

How to get engaged

Network on Remote Sensing and Geographical Information

- **Advice** to GIZ projects and internal units on the acquisition and processing of geodata, for example
  - Advising partners on the use of EO technologies for various purposes
  - Finding partners to implement EO technologies
  - Organisation of events and exchange formats
  - Guidelines for purchasing of satellite imagery (in cooperation with procurement)
- Provision / organisation of **trainings**
- Observation of important **technological trends** of Remote Sensing
- Communication and **networking** with partners from the private sector, research institutions, etc.
- **Past / Ongoing activities:** « Forum on Remote Sensing and Geographical Information » (since 2017), *Summer School* « *Remote Sensing for International Development* » (2019), Annual Meeting of the Expert Network (2019), various trainings / webinars (2020)

Activities 2022

- **Annual Meeting of the Expert Network Remote Sensing and Geographical Information 2022**
  - Initiative by GIZ Sectoral Department and GloBe
  - Cross sectoral network of experts, facilitates exchange between geospatial technology consultancies / companies as well as research institutions and GIZ employees
  - First meeting in September 2019, about 30 representatives of service providers and cooperation partners, about 50 GIZ employees were present
- **School Remote Sensing for International Development**
  - Training in cooperation between University Würzburg - Department of Remote Sensing, DLR and GIZ (lectures, hands-on exercises, keynotes by practitioners)
  - First summer school in 2019, 22 participants from Ethiopia, DR Congo, Namibia, Philippines and Germany
- **Forum on Remote Sensing and Geographical Information (continuous)**
  - Internal Meeting of GIZ staff interested in Remote Sensing / GIS
  - Regular presentations from different guests (external researchers, companies, GIZ projects etc.) and varying topics, for example, monitoring of forest loss or REDD+, risk natural disaster adaption planning, agriculture, applications for high resolution imagery… you can also suggest topics yourself!
  - Invitations via IDA-community or contact Geographical Information@giz.de
- **Newsletter**

Exchange formats, events and useful information

Fernerkundung für Entwicklung

« Forum on Remote Sensing and Geographical Information » (Themenforum)
→ please contact
geoinformation@giz.de

Teams-Community
QGIS Community

Newsletter
(« Newsletter der Fachbereiche »)
News on training offers, webinars, publications, data offers, *Spring School 2021*, Expert Network meeting, projects, etc.

Digital Gateway
Trend Topic
Remote Sensing and Geographical Information

Legend
- Number of GIZ projects using remote sensing
- Countries in which GIZ projects are using remote sensing and geoinformation
- Additional countries participating in the Planet Test Campaign

The 2030 Agenda's data challenge

Contact

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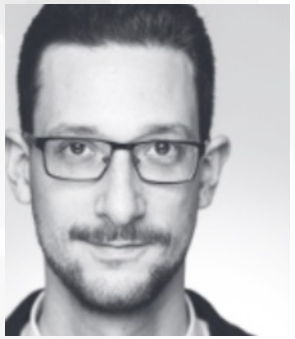

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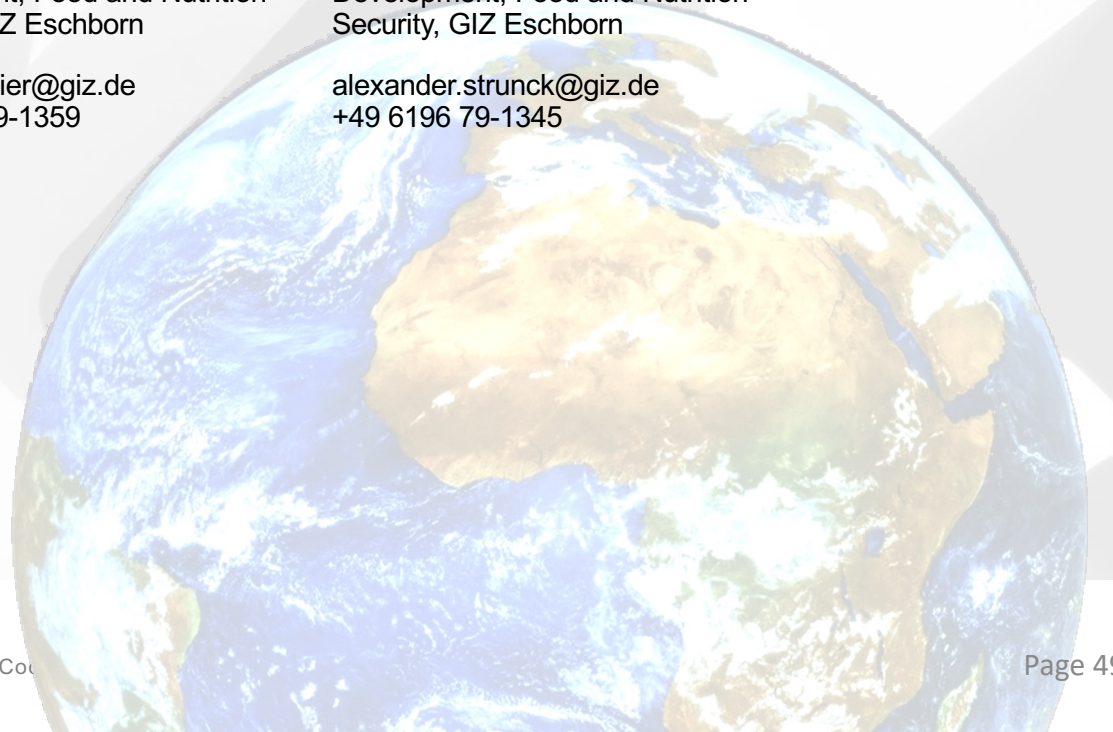
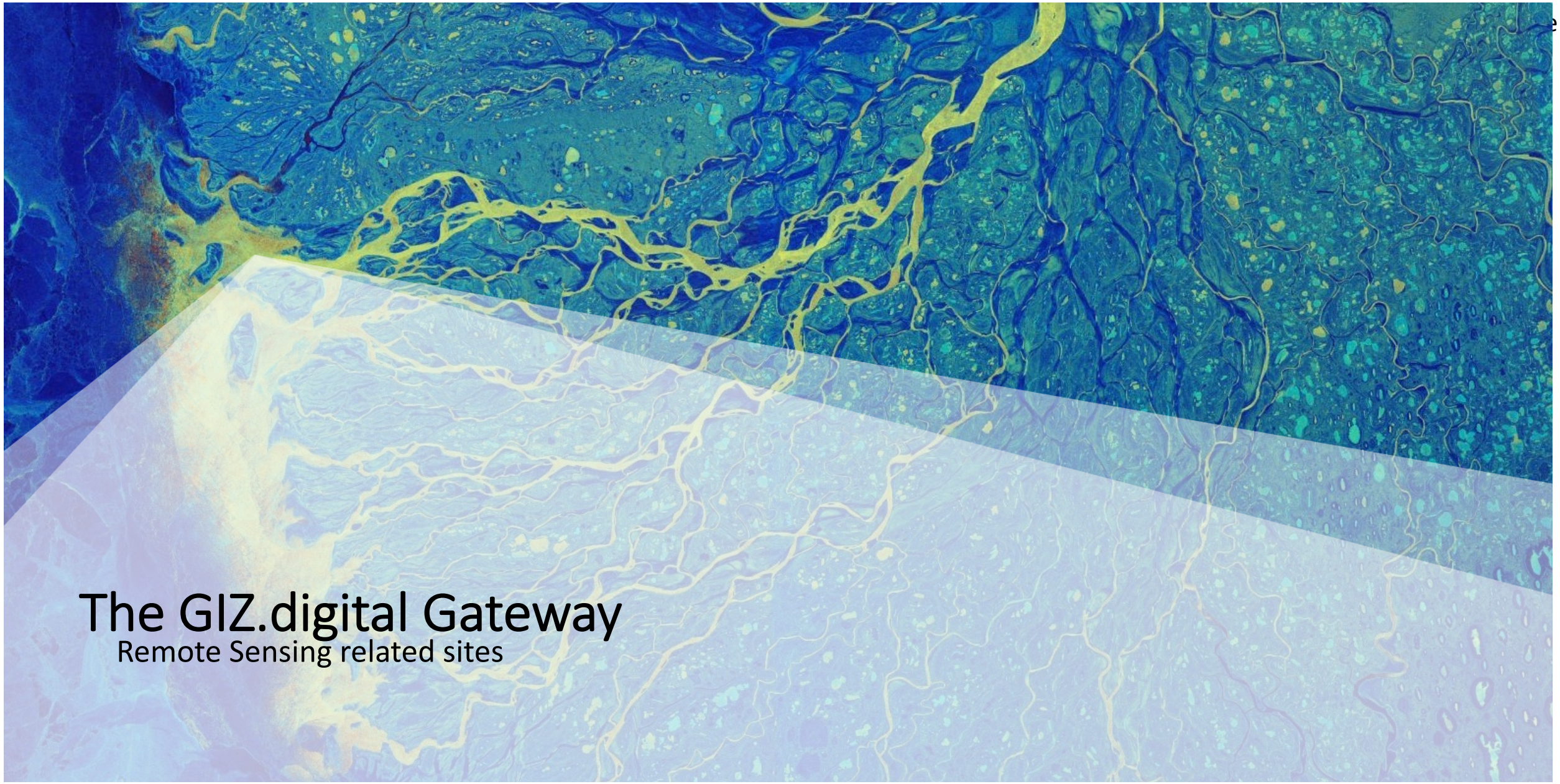
Photos: all ESA, GIZ (unless otherwise stated)

www.giz.de

https://twitter.com/giz_gmbh





The GIZ.digital Gateway

Remote Sensing related sites

Digital Gateway

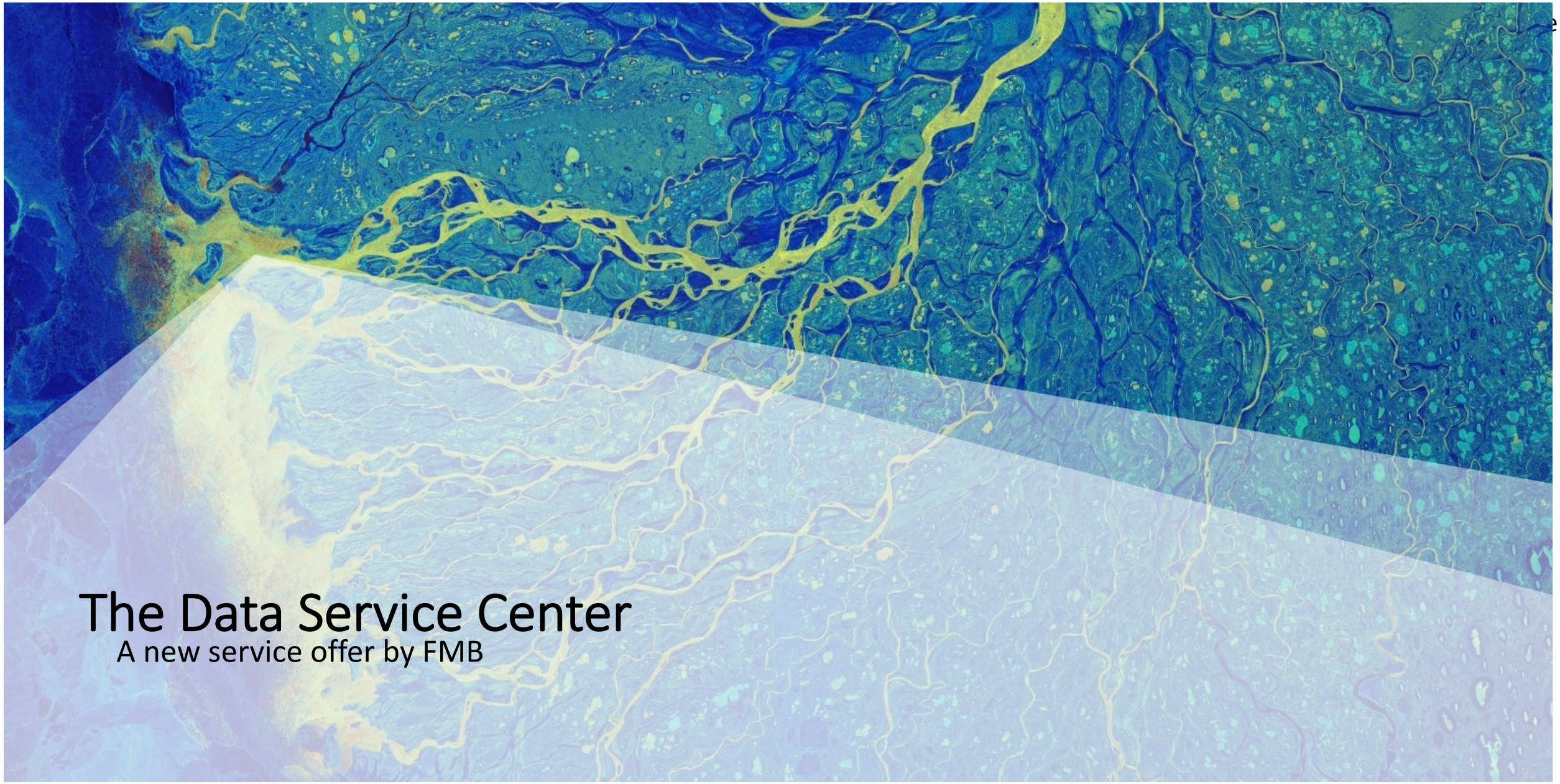
Landing Page

Aspects to consider when buying satellite data (sharepoint.com)

Free access to high-resolution satellite data provided by GFOI and Norway (sharepoint.com)

Earth Observation Data – An introduction (sharepoint.com)

Data Service Center (sharepoint.com)



The Data Service Center

A new service offer by FMB

Why does GIZ need a data service center?

•Access

- Provides centralized access to infrastructure, data sources and expertise.

•Analysis

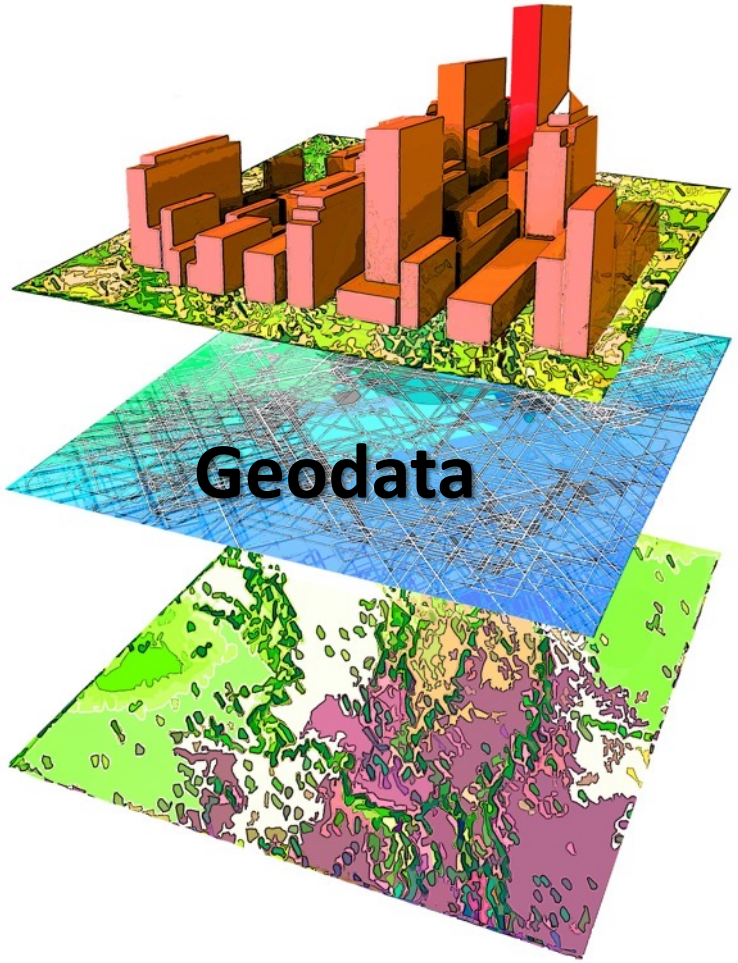
- Advises on the integration of data into the project cycle and provides analysis.

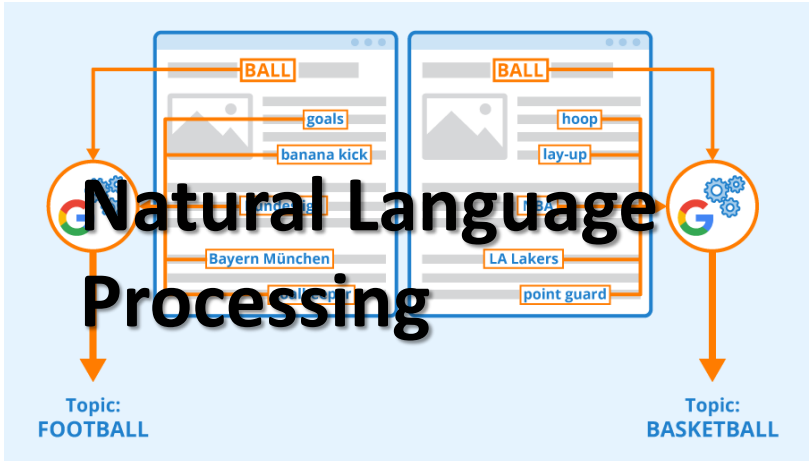
•Effect

- Provides support for data collection to demonstrate impact.

What topics is the Data Service Center working on?

The Data Service Center is currently active in three fields:





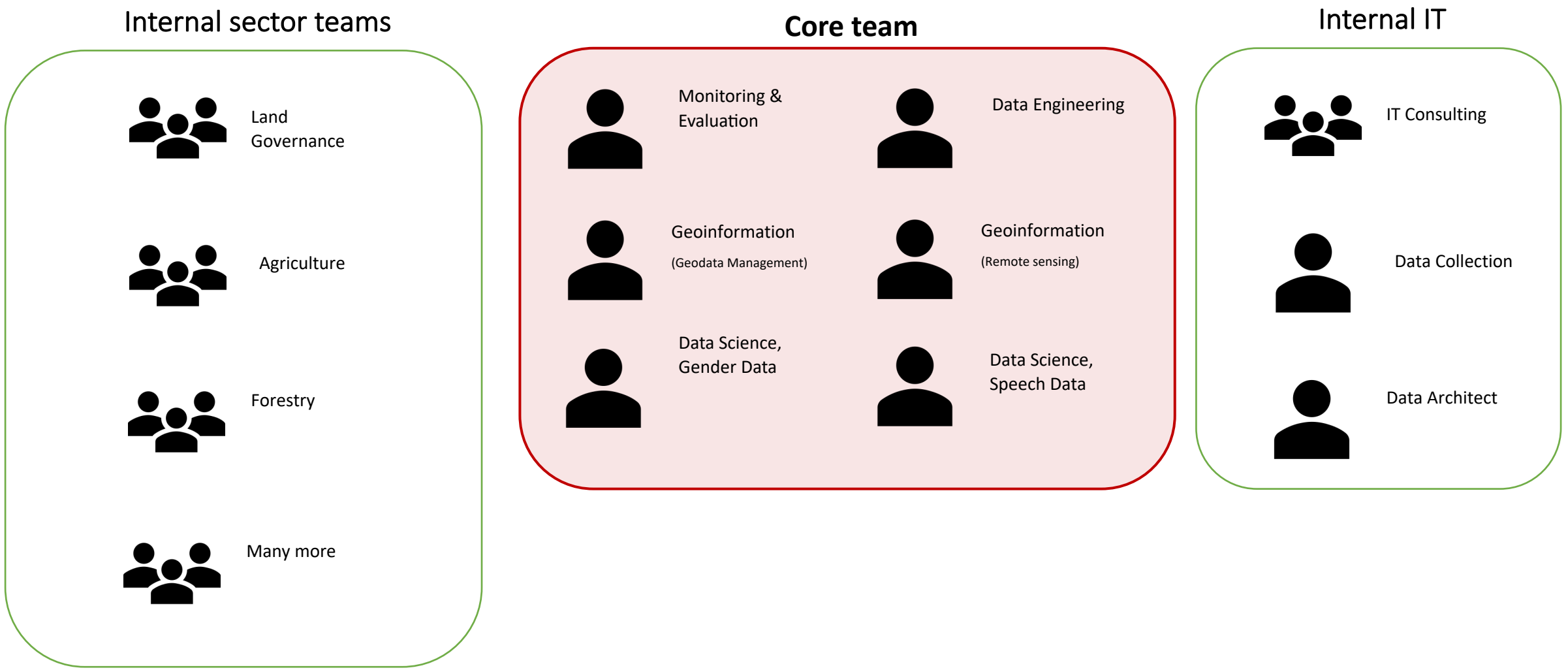
Geodata

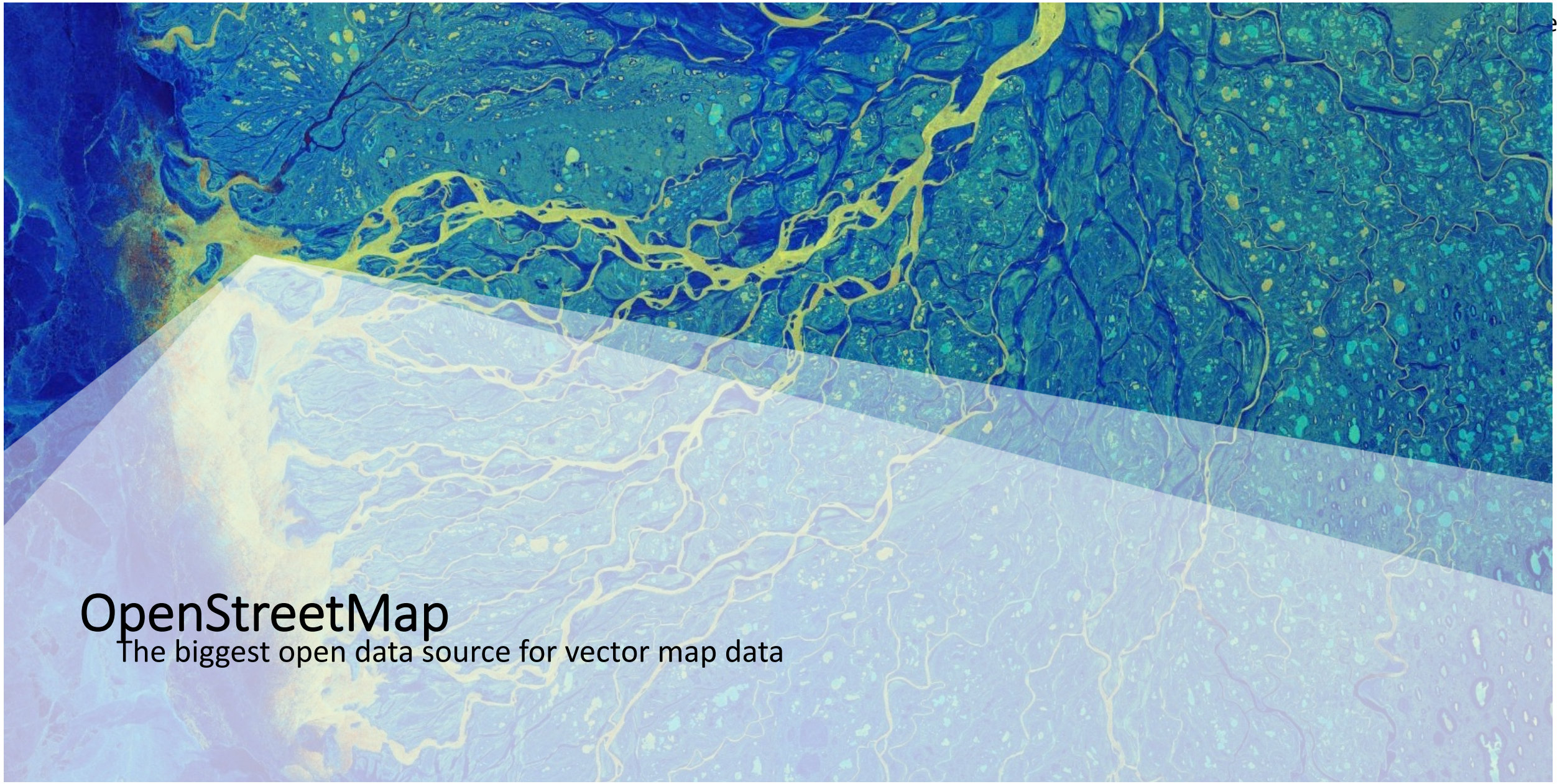
- **Infrastructure**
  - Central storage and exchange
  - Inclusion in the course of the project

- **Processing**
  - Central data provision, analysis and preparation
  - Provision of open and commercial data sets

- **QGIS**
  - Community of active GIZ-QGIS users
  - Customized training for projects
  - Help with setting up geoinformation systems

Team (under construction)





OpenStreetMap

The biggest open data source for vector map data

OpenStreetMap

(132) Two Minute Tutorials: What is OpenStreetMap? - YouTube

Programme

- Welcome
- Setting the scene and activation – Stories of Learning
- Inputs & Joint discussion –
  - **Lessons from TOSCA: Toolkit for Sustainable City Planning & Analysis** - Sumana Chatterjee and Nina Graefenhahn
  - **Meaningful and inclusive (digital) participation in urban planning and management: Not without PartiCipate!** - Lisa Hiemer-Maqoma
  - **Remote Sensing and Geographical Information** - Gunnar Hesch
- Crowd mapping and categorizing digital tools together in an interactive format
- Input about IT-procurement – **what to consider when purchasing digital planning and participation tools and where to find help** - Anne Doose

Collective Intelligence

Results in miro

- **Goal: collect examples of existing tools and platforms for Digital planning, mapping and participation which you already know or find on the web**

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Procuring digital tools

IT Project management in the context of GIZ

giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Different types of procurement

“Off the shelf”
buy from market

Customize

Building Blocks for your needs – remix of readymade product from market and tailormade development

Tailor-made/Develop

build your own IT solution

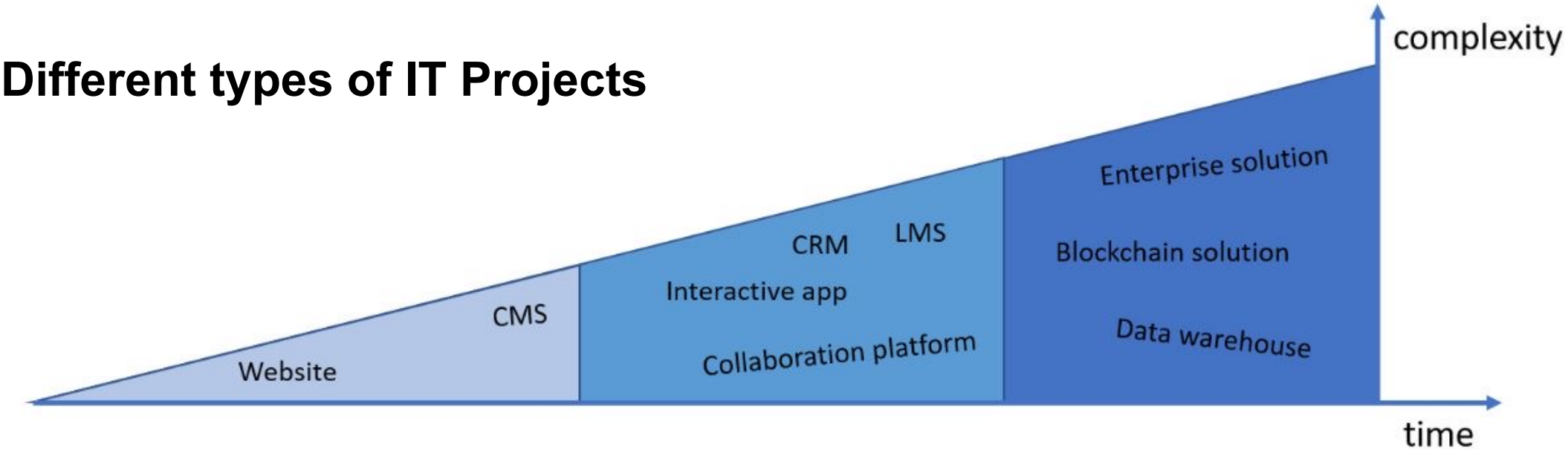
For sustainability: Always calculate with the **Total Cost of Ownership**!

Different forms of procurement

- Context: What can be implemented?
  Network-Connectivity-Access? DataReportal – Global Digital Insights; IKT Länderskizzen
- Principles for Digital Development

- Platform as a service
- Software as a service
- Hardware
- Software
- IT infrastructure
- Maintenance
- Security
- Open Source (≠ for free)
- Proprietary

Different types of IT Projects



The image below shows the different project phases for IT projects. Please note that while the guiding questions belong to a certain category, **the questions and outcomes need to be sorted before starting the IT tender**.

Time Estimates*	~6-8 months to IT Tender	~3-6 months to IT Tender	up to 9 months tender process	3-6 months after contract start	from roll-out to contract end
IT Project Phases	Planning & Analyzing	Design & Solutioning	IT Tender	Implementing	Maintaining & Sustaining

The time it takes: 18 - 29 months….

Time Estimates*	~6-8 months to IT Tender	~3-6 months to IT Tender	up to 9 months tender process	3-6 months after contract start	from roll-out to contract end
IT Project Phases	**Planning & Analyzing**	**Design & Solutioning**	**IT Tender**	**Implementing**	**Maintaining & Sustaining**
Guiding Questions	Why is IT solution necessary for impact creation? Who will use IT solution? Which requirements exist? What about own capacities (see Implementing)?	What kind of IT solution and operation model is required? What is on the market? What should it cost in which time span?	Which type of tender is required based on financial volume? What is exactly needed from IT service provider? How can sustainability be ensured (see FollowUp)?	What about own capacities to manage IT projects to ensure smooth roll-out: Expertise? Decision-Making? Network to relevant stakeholders?	Will the IT solution be transferred to partner or is a new IT tender necessary? What is technically and organizationally necessary to handover and foster ownership?
Main Outcome	Clear understanding how IT solution contributes to generating impact Specific, consistent, formal and prioritized list of requirements	Clear understanding of relevant specifics, such as Operation Model Data aspects IT landscape Readily available /. customization? Open Source /. proprietary? Hand-over & Sustainability	ToR and required documents to start tender Adequate IT service provider is contracted after tender completion	IT solution is developed, implemented and rolled-out	IT solution is transferred to partner, contract extended or newly tendered

** Please note that time spans heavily vary based on complexity and financial volume of the IT solution. Therefore the time estimates only serve as generic orientation, so that we recommend to approach the setoral department at a very early stage to allow a more in depth analysis.*

Contact, information and help

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[Toolkit for IT Project Management in the Context of German Development Cooperation]

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