



SRIP Smart Cities & Communities

SAFE CITY AS FOUNDATION FOR A SMART CITY

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Operation is co-financed
by Republic of Slovenia and European Union
from European Regional Development Fund



REPUBLIC OF SLOVENIA
MINISTRY OF ECONOMIC DEVELOPMENT
AND TECHNOLOGY



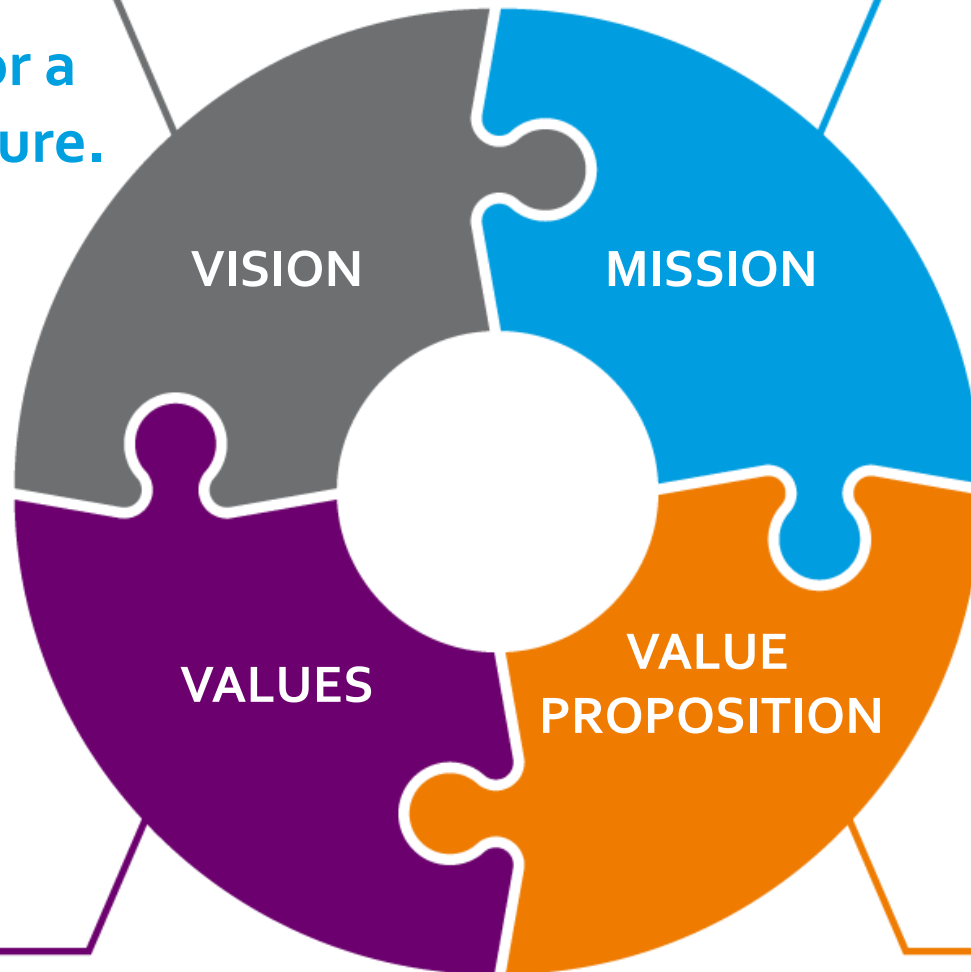


ICT and SAFETY

are embedded in our DNA

Iskratel's ICT and Safety Footprint

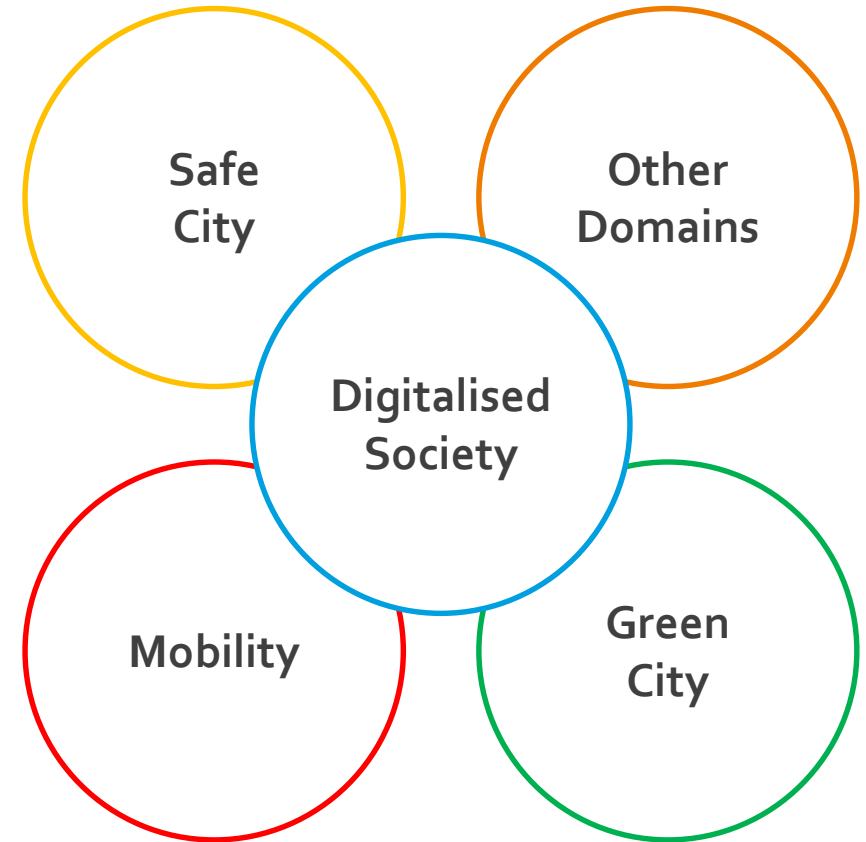
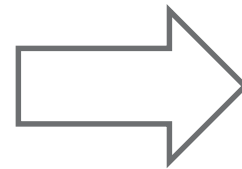
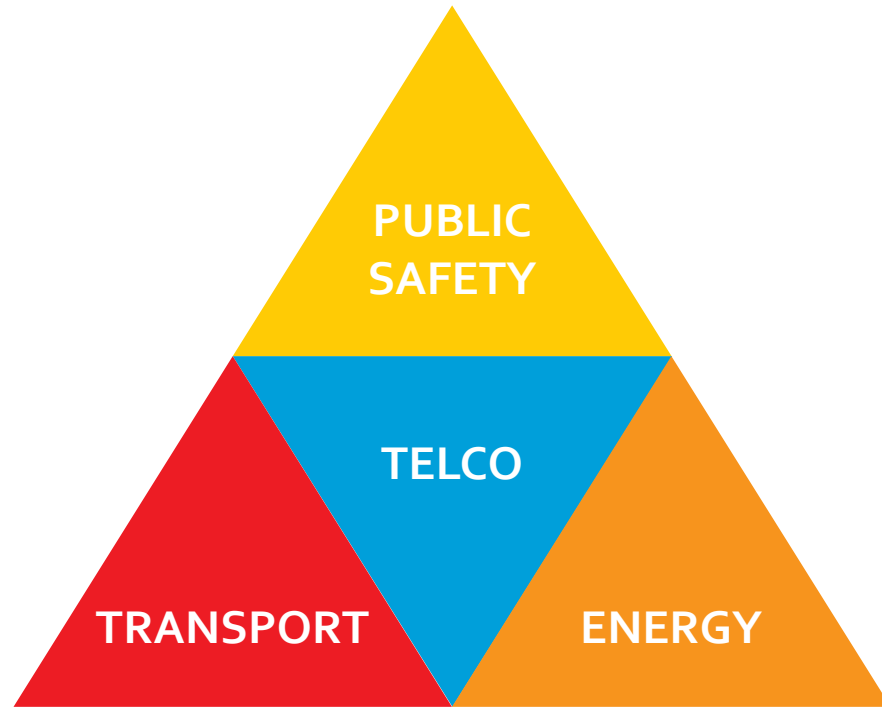
Comprehensive digital solutions for a safe and smart future.



Teamwork
Initiative
Respect
Innovation
Responsibility

- **We create** new value, ensure **safety** and improve the overall quality of life.
- **We provide** reliable and **comprehensive solutions** for telecom operators and **service providers**, for the **digitalisation** of transport, **public safety**, and energy.
- **We ensure** the long-term success of our customers and partners, while also taking into account the **local characteristics** and quickly **adapting** to them.
- **Solutions provider** (providing integrated solutions and products based on the needs of the customers and markets).
- **First among equals** (**the use of technological innovations to create added value for customers**).

Business Areas Aligned with Smart City Domains



Integrated infrastructures and processes across ICT, energy, transport and safety, and other domains

Smart and Sustainable Cities and Communities

A hand holding a glowing lightbulb next to stacks of coins on a desk. The background is blurred, showing a person working at a computer. A blue horizontal bar is overlaid on the image, containing the text.

We have to be Safe

to be Smart

The EU is committed to implementing the 2030 Agenda for Sustainable Development, including Sustainable Development Goal 11

Make **cities** and human settlements **inclusive, safe, resilient and sustainable**.

Source: Transforming our world: the 2030 Agenda for Sustainable Development, A/RES/70/1 (21.10.2015), [here](#)

Iskratel vision of „Safe City“

Safe City unites **businesses, municipal authorities, general public, emergency response units** and **law enforcement agencies** in order to **maximize safety** and lower response times in case of **emergency situations (*)**.

Responsibility shared between **multiple agencies** and **safe city initiatives** for:

- **prevention** through **better intelligence sharing**
- **risk mitigation** through **better incident management.**



Source: <http://www.niteshrealty.com/2016/11/smart-safe-city-project-work-begins.html>

Source (*): Robnik A. (Iskratel), Terekhov A. (Iskratel), Fedorov V. (IUT), "Safe City" – an Open and Reliable Solution for a Safe and Smart City, Elektrotehniški vestnik 79 (5):262-267, 2012

Public Safety Solutions

Safeguarding the public. Smarter.



Emergency communications (112)

Significantly improving incident detection and response times. Real-time information, analytics and automated workflows for operators.



eCall

Solution has proven to halve emergency-services response times in traffic accidents by sending a "minimum set of data" (MSD) notification, which provides the exact location of the incident.



Safe & Smart city

Connecting smart technologies into a responsive and efficient Safe City Operations Centres.



5G Safety

5G broadband critical communications networks and broadband services and applications to be used by public safety, security and rescue organizations (PPDRs).



When Openness and

Solution Ecosystem matter

SCOC for better intelligence sharing



Government Agencies



Citizens



Municipal Authorities



Urban Safety Manager



Private Security Personnel



EROs (PSAP, ...)



Medical Dept.



Disaster Warning & Rescue Dept.



Environment Protection Dept.



Fire Dept.



Police Dept.

Municipal Governance Safe City Operations Centre

Sensors

Systems

Processes

People

Emergency Management

Law Enforcement



Natural Disasters



Public Accidents



Public Health



Social Unrest

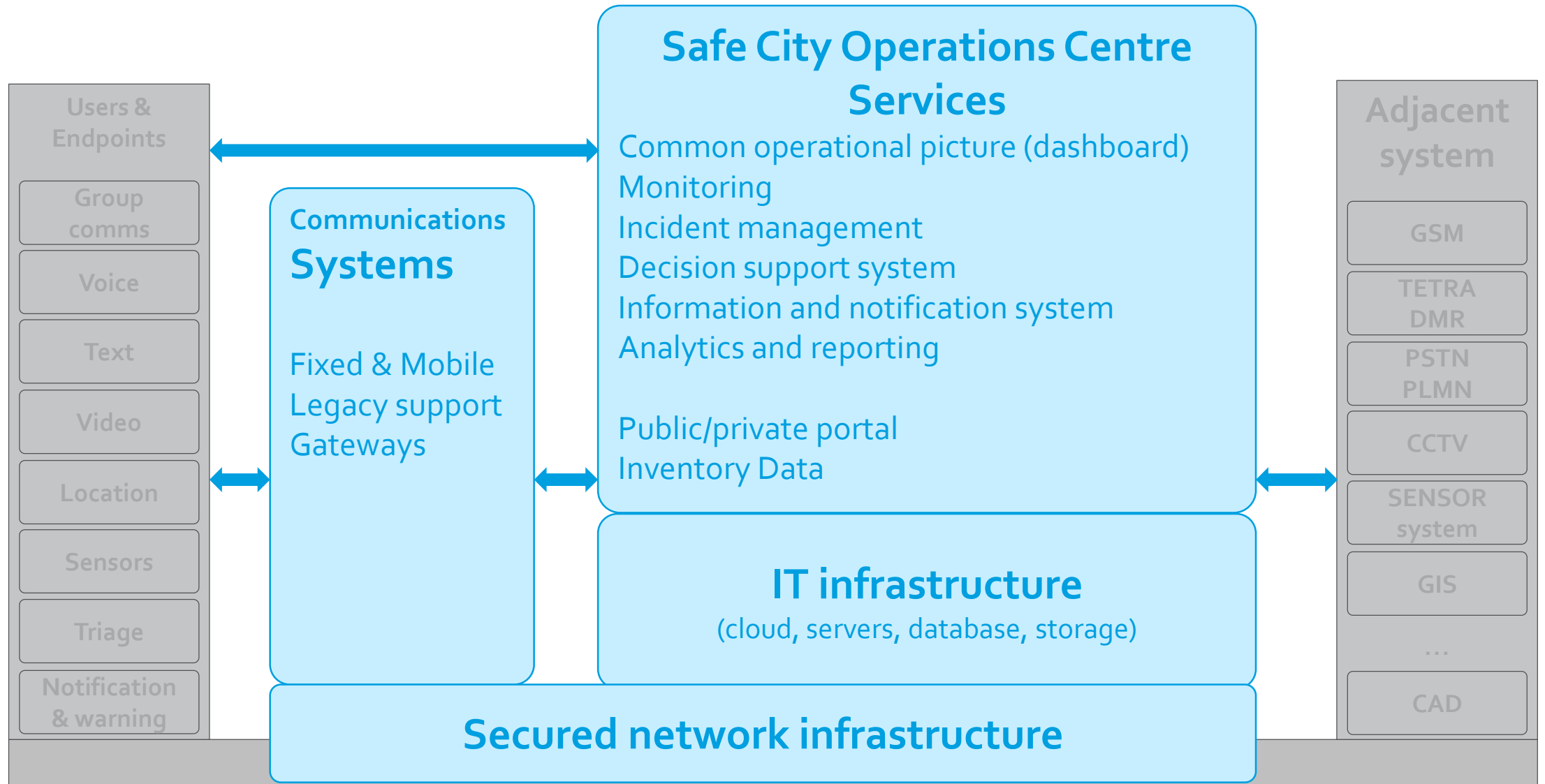


Criminal Cases



Public Order Cases

Iskratel's fit into the Solution Ecosystem



Incident Management & Information and Notification

... for Risk mitigation and Safer society

- Work as a Solid solution with Flexibility and Adaptation at its edge
- From Events to Incidents by using Intelligent algorithms
- Inform & Notify depend on Context, Area and I&N Channels

The screenshot displays the 'PINS OPERATOR' interface. At the top, it shows operator information: 'Operator: 17001', 'Service: PSAP 112 Iskratel', and 'Region: Slovenija Kranj'. Below this is a 'Call History' section with buttons for 'Map', 'Report', and 'Call CT'. The main area is titled 'Incident Card List' and contains a table with columns for 'New Incident', 'State', 'Card ID', 'Created', 'Incident Location', and 'Operator'. The table lists 14 incidents with various states like 'no data', 'cleared', 'finished', and 'pointed on map'. A sidebar on the right shows a 'Contacts' list with categories like 'Fire', 'Police', 'Ambulance', 'Gas', and 'UDS'.

#	State	Card ID	Created	Incident Location	Operator
1	no data	inc06_not_set_004	14.57.35 06 jun 2018	no data	eCall
2	no data	ang24_not_set_005	14.20.47 24 apr 2018	no data	17002
3	cleared	ang24_Call_002	14.08.15 24 apr 2018	no data	17001
4	cleared	ang24_not_set_001	11.02.39 24 apr 2018	no data	17001
5	cleared	Mar30_not_set_004	11.45.46 30 mar 2018	no data	17001
6	cleared	Mar30_not_set_001	04.54.04 30 mar 2018	no data	17001
7	finished	Mar29_not_set_003	07.29.47 29 mar 2018	no data	17001
8	finished	Mar26_not_set_001	12.02.52 26 mar 2018	no data	17001
9	no data	Jan10_not_set_001	09.57.33 10 jan 2018	no data	17001
10	pointed on map	Oct05_FireRes_001	12.46.54 05 oct 2017	no data	17001
11	no data	Oct05_Hostages_001	12.00.40 05 oct 2017	no data	17001
12	no data	Oct05_Fight_001	12.00.16 05 oct 2017	no data	11001
13	no data	Oct05_Electr_001	11.34.41 05 oct 2017	no data	10001
14	no data	oct05_FireIndu_001	11.29.55 05 oct 2017	no data	10001

The screenshot shows the 'PINS OPERATOR' interface with a map view. The map displays a geographical area with a grid overlay and various colored markers representing incidents. A sidebar on the left shows a 'List of ascending devices' table with columns for 'Type', 'Name', 'Status', and 'Action'. The map includes a search bar and navigation controls.

Type	Name	Status	Action
Station (7)	Station_Dravn_01	OFF	+
Station (7)	Station_Dravn_02	OFF	+
Station (7)	Station_Dravn_03	OFF	+
Station (7)	Station_Dravn_04	OFF	+
Station (7)	Station_Dravn_05	OFF	+
Station (7)	Station_Dravn_06	OFF	+
Station (7)	Station_Dravn_07	OFF	+
Station (7)	Station_Dravn_08	OFF	+
Station (7)	Station_Dravn_09	OFF	+
Station (7)	Station_Dravn_10	OFF	+
Station (7)	Station_Dravn_11	OFF	+
Station (7)	Station_Dravn_12	OFF	+
Station (7)	Station_Dravn_13	OFF	+
Station (7)	Station_Dravn_14	OFF	+
Station (7)	Station_Dravn_15	OFF	+
Station (7)	Station_Dravn_16	OFF	+
Station (7)	Station_Dravn_17	OFF	+
Station (7)	Station_Dravn_18	OFF	+
Station (7)	Station_Dravn_19	OFF	+
Station (7)	Station_Dravn_20	OFF	+

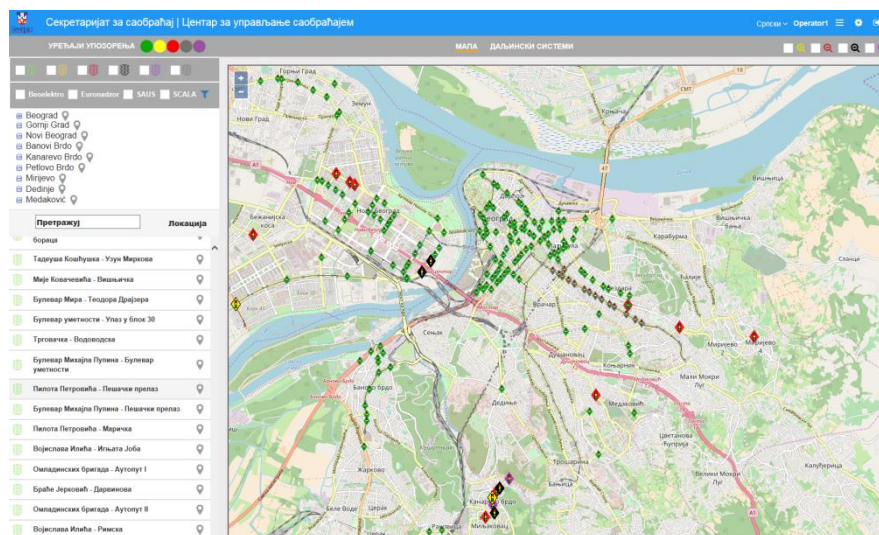


Monitoring and
Disaster Recovery

for Traffic, Flooding and Fire

Traffic Management Centre

- **Centralised management** – Integration of traffic lights systems, traffic measurements, video surveillance subsystems, GIS, etc.
- Common Operational Picture with **unified User experience**
- Presentation of **key information** and incidents on the big **video walls**



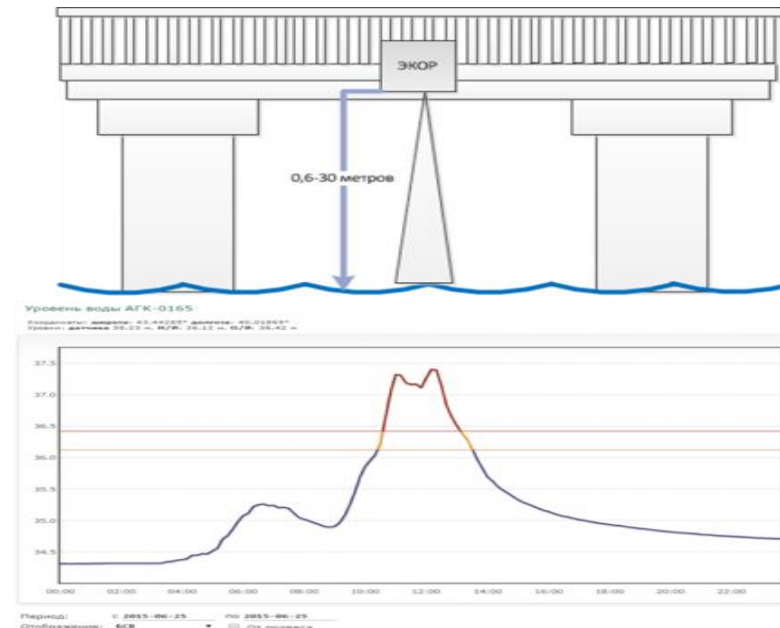
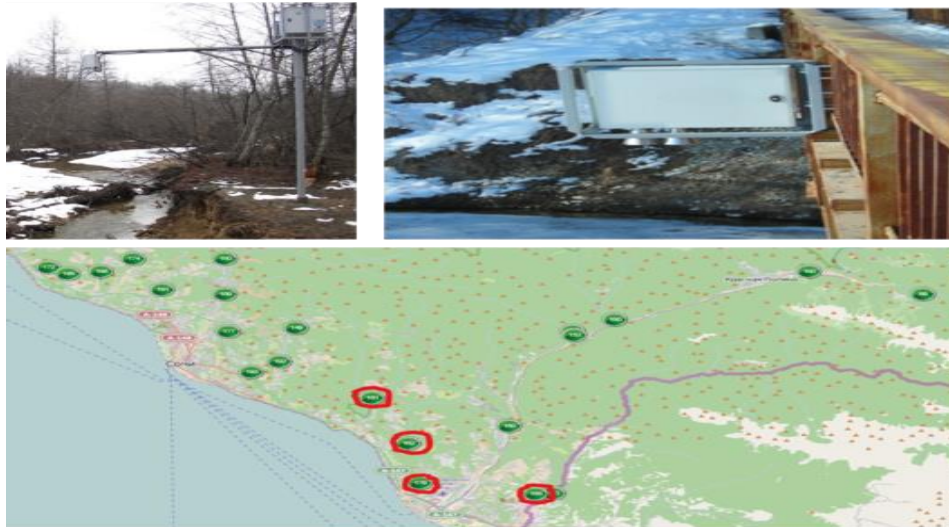
Forest Fire Control

- **Automatic monitoring** to detect wildfires at early stage on larger areas with smoke and flame detection systems
- Shorter response times **reduce** affected areas due real-time information
- **Less human** and **other resources** to extinguish fires



Monitoring system for Flooding

- Gathering information via:
 - **Sensors, cameras**, citizens' phone **calls** or **WEB** portal
- Effective **incident verification** and civil **protection**
- **Guided response** based on standardised procedures
- Activate **relevant forces** to **minimise** human **casualties** and property **damage**

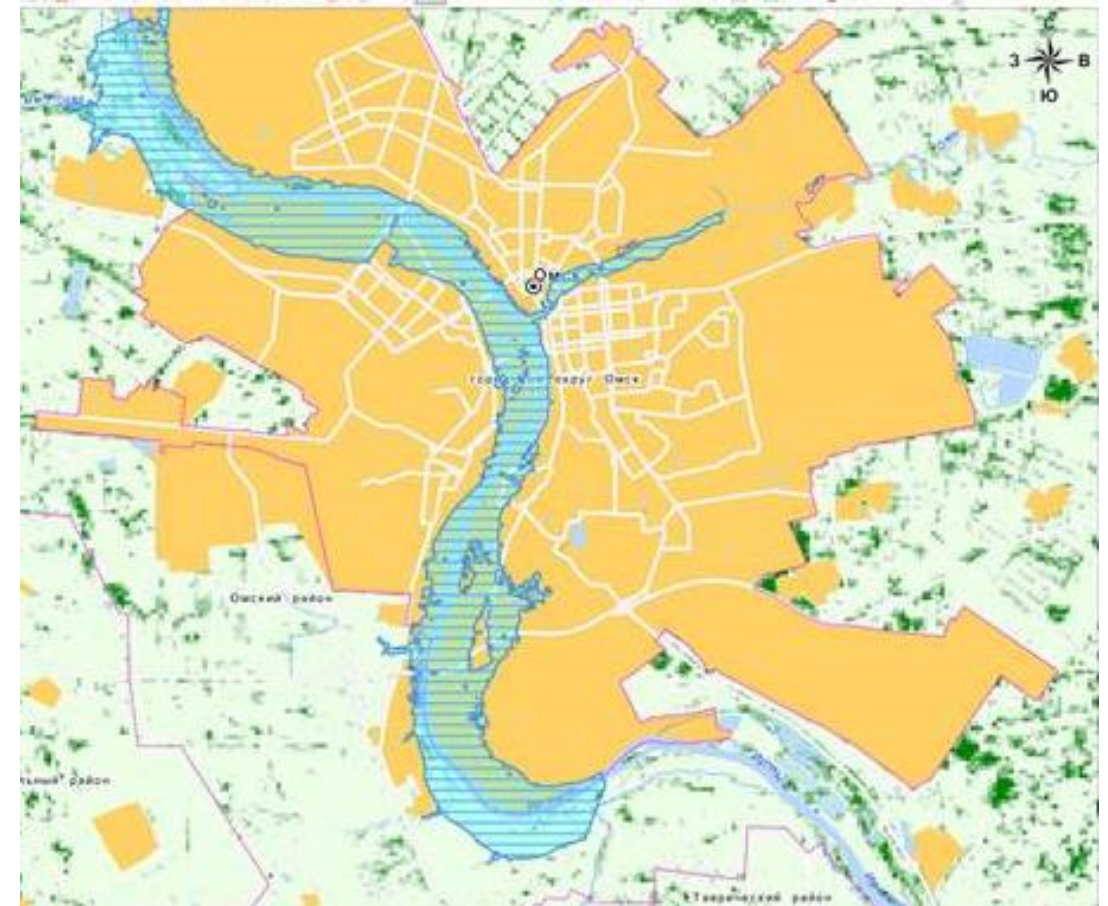


Decision support system

Flood visualization and simulation in the marked area

The Civil Protection Authorities can:

- **Play out** different **scenarios** (e.g. 150 cm floods in the city -> how many people/building are affected etc.).
- **Minimise** unwanted **situations** (building protecting dams).
- **Prepare** for these **situations**.



Source: The Solution Partner Kami [here](#)



Technology as a tool

Our Competences as a glue

Safety and ICT KET^[1] for now and future...

... where Broadband, Narrowband, Actionable Intelligence and Trustworthiness matter

Internet of Public Safety Things (Smart sensors, devices and wearables, ...)

Mobile policing towards 5G (Network as a Service - SDN, NFV, ...)

(Private) Cloud/Fog Services (IaaS, PaaS, SaaS)

Video Surveillance and Video analytics

Time-based location information (AML)

Unmanned aerial vehicles (drones, „unmanned“ devices)

Virtual and augmented reality

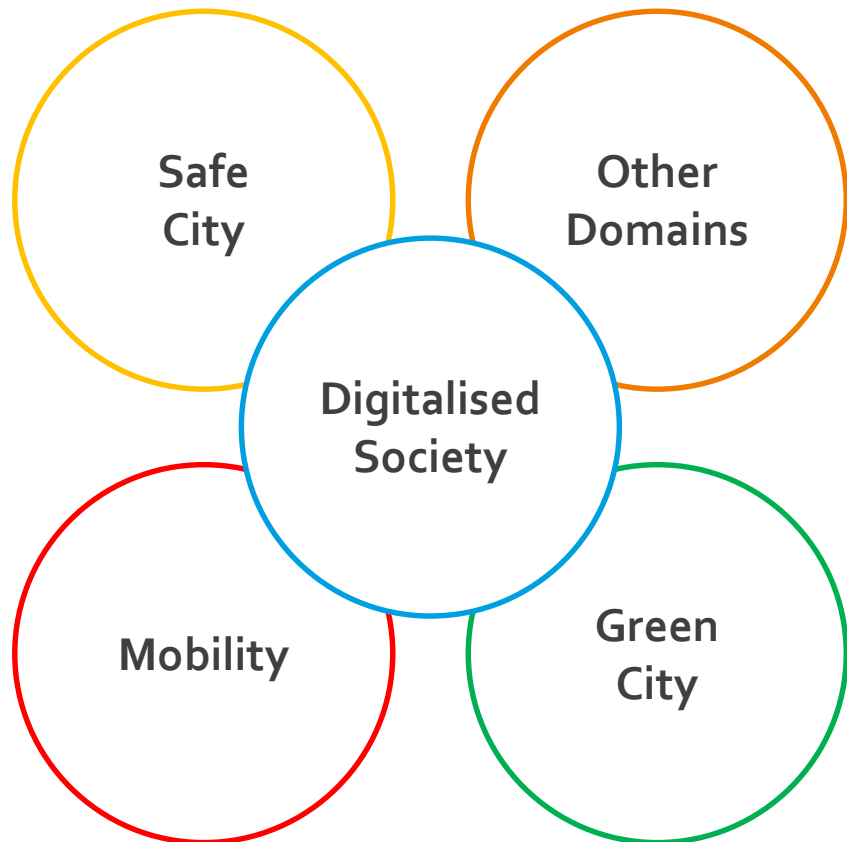
Big data and artificial intelligence

Cyber security and Identity management

Privacy and Trust



Safe City is the Foundation for a Smart City



Safety first, with Digital

A plethora of Stakeholders benefits from
Safe City Operations Centre

Solution Ecosystem matters

KETs for Innovation and new Business models

Safe City Solution creates Added value for all

Thank You for Your Attention



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