

FREQUENTIS – FOR A SAFER WORLD

Harnessing the potential of
external information sources in the Control Room

2014-05-21

Peter Haberl

FREQUENTIS

→ Principal processes in a Control Room / PSAP



We're coming!

Please Help!

Go out and help!



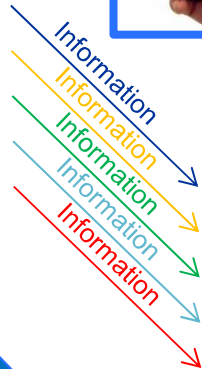
→ Principal processes in a Control Room



mostly with / by
Voice only!



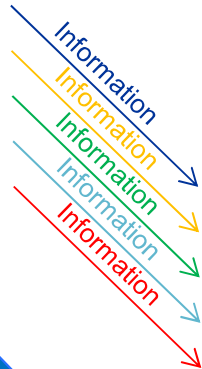
1
collect information



→ Principal processes in a Control Room



1 collect information



2 make right decision

→ More & more data in the Control Room



→ More & more data in the Control Room



→ Mobile Phone/Radio Evolution...

- TECHNOLOGY changes fast
- PROCESSES are very reluctant to changes



Generation „Smartphone“

ieee Spectrum, 09/2012, DAN SIEWIOREK

→ Principal processes in a Control Room



→ Challenges: The Public

→ Contact PSAPs with today's and tomorrow's technologies

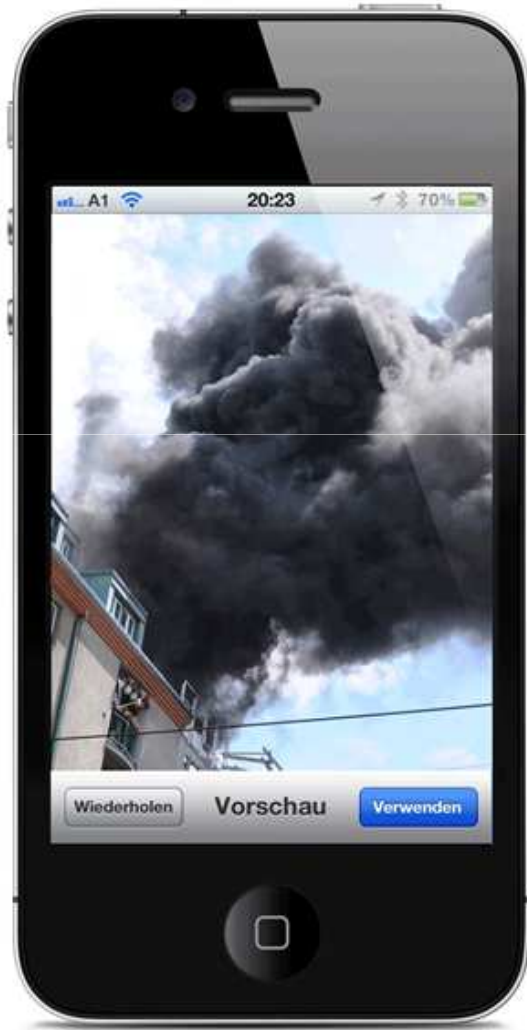
- From any available **Device**
 - Smartphone,
 - Mobile phone,
 - PC/Laptop,
 - Tablet,...
- Using any **Media**
 - Voice,
 - Text (SMS/Email/Realtime texting),
 - Pictures,
 - Video,...
- Using any **Service** (Social Media)



Generation „Smartphone“

ieee Spectrum, 09/2012, DAN SIEWIOREK

→ External data: here a video as an example



imagine how long you would need
to describe this scene in your own words...

→ Engaging the public

Less data:

Call them...



More data:

Any Media, Any Device, Any Service...



→ More & more data in the Control Room

mostly with / by
Voice



2 make right decision

→ Challenge: Operator's Working Environment

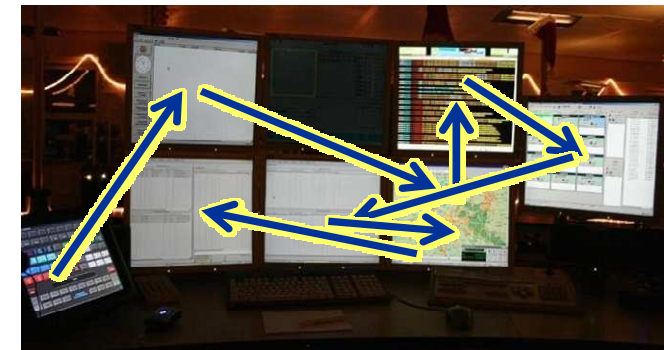
→ Until mid 1990s: Operator as Service-Integrator

- Different Media for specific tasks
- Paper & Pen
- No Integration



→ Mid 1990s till now: Operator as Business-Service-Integrator

- Silos: CAD, RMS, ICCS, GIS, AVLS etc.
- None to Low Horizontal Business Process Integration
- High Maintenance efforts for individual Databases



→ Now: Horizontal/Datacentric Integration

- Seamless Integration different Systems
- Reduction of Manual Tasks, Increase of Operator Performance
- Mission centric!



FREQUENTIS 3020 LifeX 14:54:59 03/24/2014

Search ...

RADIO

- MOU34 (Peter Prater) on Talkgroup 3 +13 min
- MOU34 (Peter Prater) on Talkgroup 6 +23 min
- TW1234 (John Smith) on Talkgroup... +33 min

PTT

ACTION PAD


POLICE 1234567890	
HOME Somestreet 1	FIRE 1234567890

Twitter Conversation @aheschl (Andreas Heschl)

Person & Location Details

NAME: Andreas Heschl
SCREEN NAME: @aheschl
JOINED TWITTER: 2 years ago
TOTAL TWEETS: 19
HOME LOCATION

aheschl March 20 2014, 12:32:40
@LifeXNG112 die 2 Verbrecher
<http://t.co/RWCHHguE04>



Twitter Conversation 04:12 @reinardvanloo (Reinard van Loo)

Incoming Call 03:32
Caller 2 (222)
Main Street 2

Intercom Call 03:32
Caller 3 (333)
Main Street 3

Emergency Call 03:32
Caller 1 (111)
Main Street 1

EMERGENCY CALLS

Emergency Call 03:32
Caller 1 (111)
Main Street 1

Emergency Call 03:32
Caller 4 (444)
Main Street 4

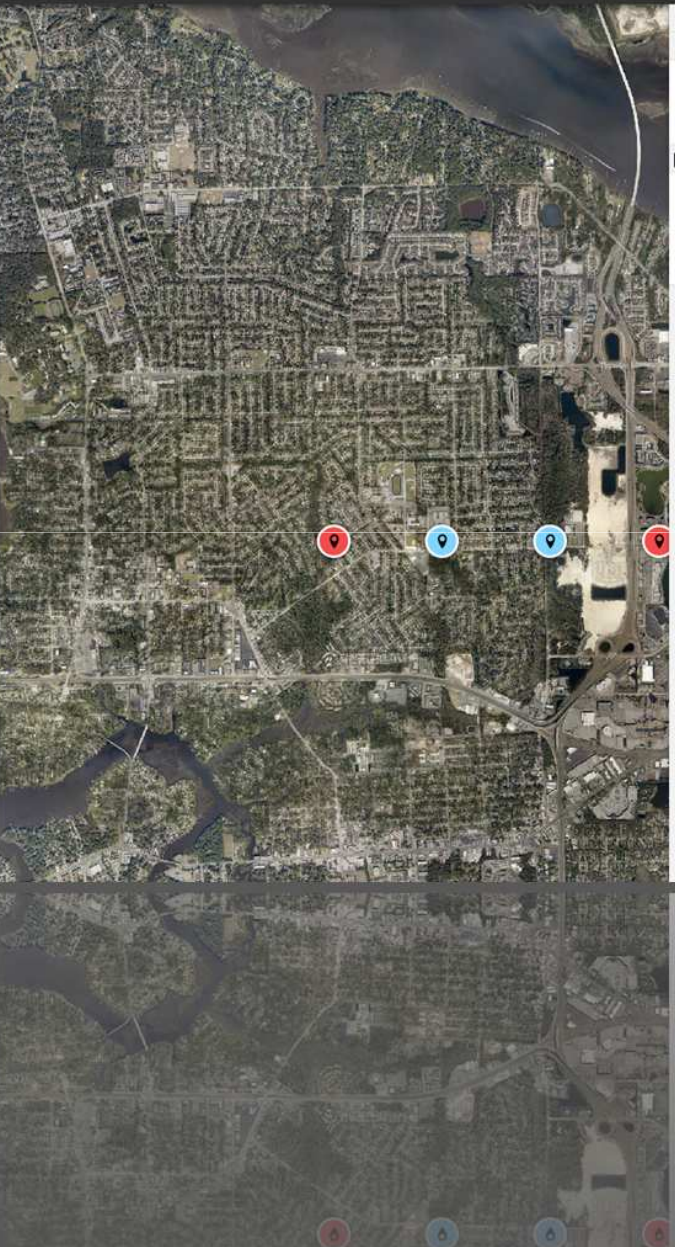
MAP SETTINGS

Data Layers

- Sessions
- Resources
- Cameras

Base Map

- satellite
- OSM
- Duval (navigation)
- Duval (landmarks)



→ Call the right resources (nearest, most adequate)



More & more Data

- Mission Order
- Mission Order
- Mission Order
- Mission Order

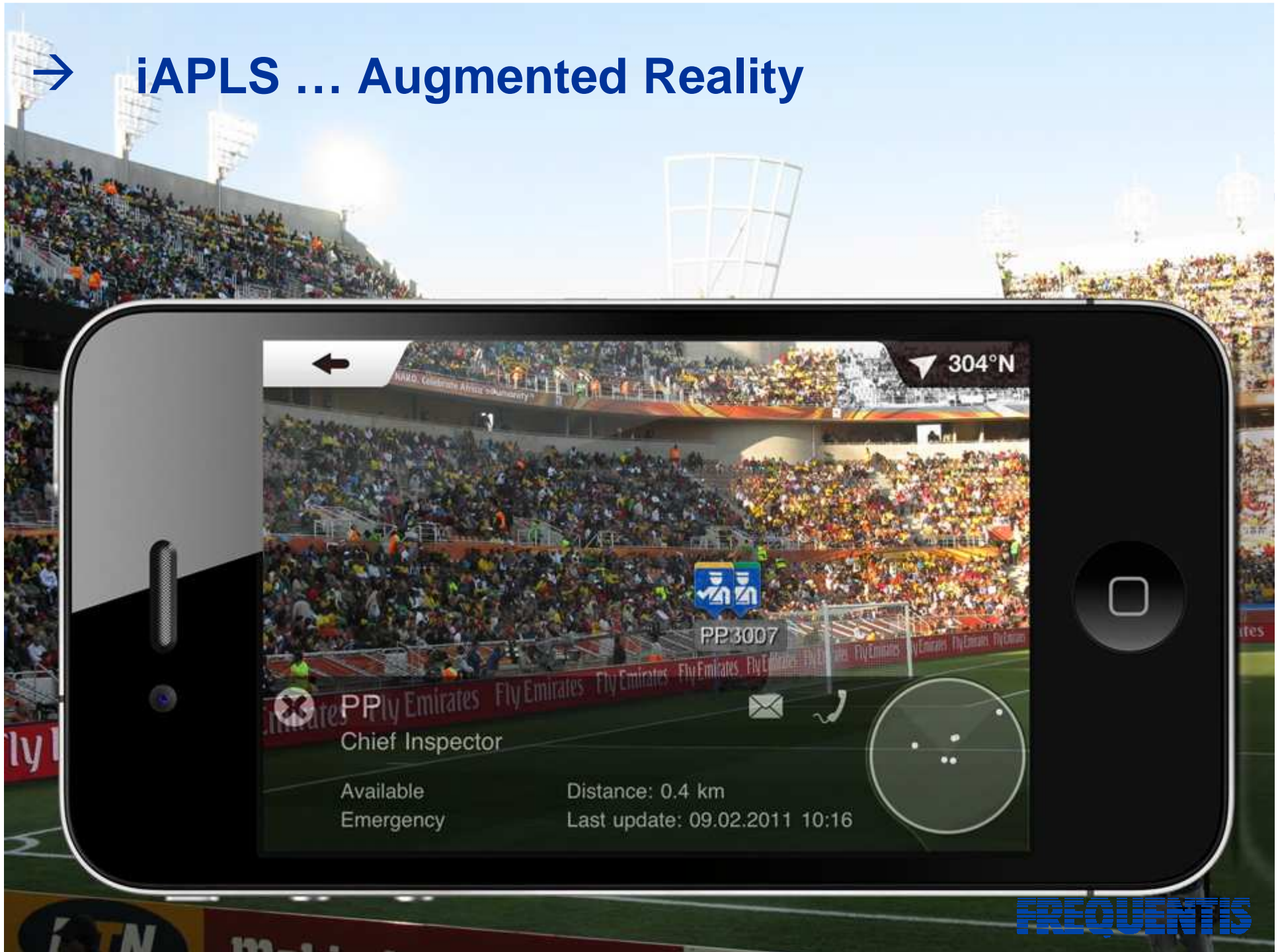
3 send out responders

→ Expectations: Field Workers/Officers

- „Information at Your Fingertips“
 - Relevant to Incident working on
 - Location Based
- Conduct and Conclude business at the Scene
 - Form Filling, Ticket Issuing, etc.
 - Integration with Back Office Systems
- Rich Media
 - Pictures (e.g. Building plan)
 - Video (e.g. live CCTV, retrieved recording)
 - Workflow (e.g. Incident Management)
- Office based applications in the field – the mobile office
- Officers as “sensors”
- Augmented Reality



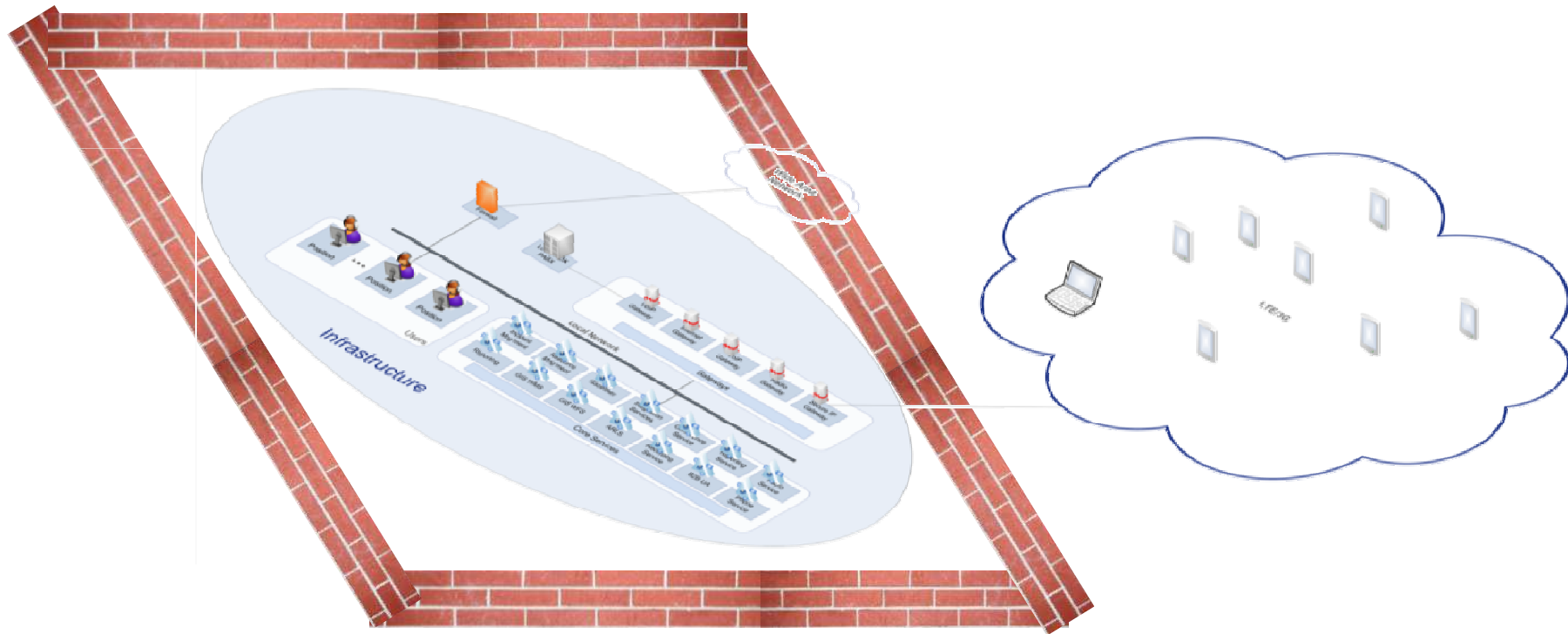
→ iAPLS ... Augmented Reality



→ The Dissolving Borders of the Control Room

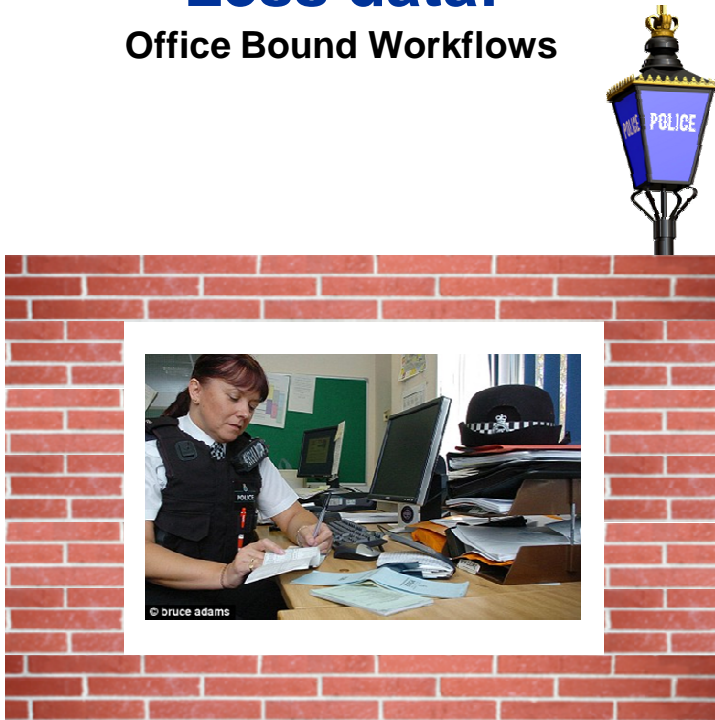
→ *past: „Your Network ... not Everywhere“*

→ *today: „Your Network ... Everywhere“*



→ Dissolving the control room border

Less data:
Office Bound Workflows



More data:
Conclude Business on the scene

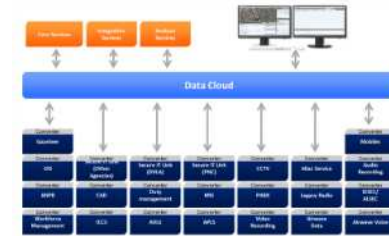


e.g. post-incident report writing....

→ Enabling Technologies

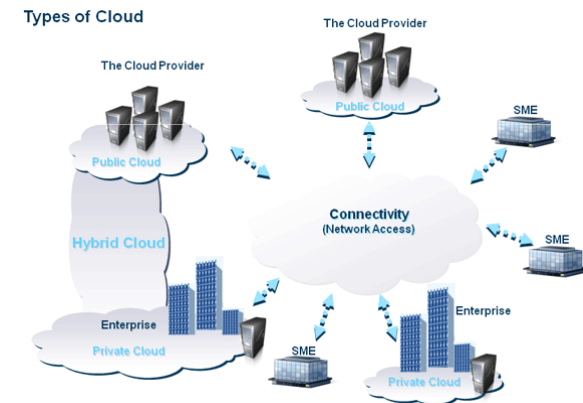
→ Service Oriented Architectures

- Efficient integration, sharing of data and functionality
- Flexibility, Security, Agility & Scalability
- Evolutionary



→ Cloud(ish) Provisioning

- Access to systems not bound to where they are located
- New Ownership models

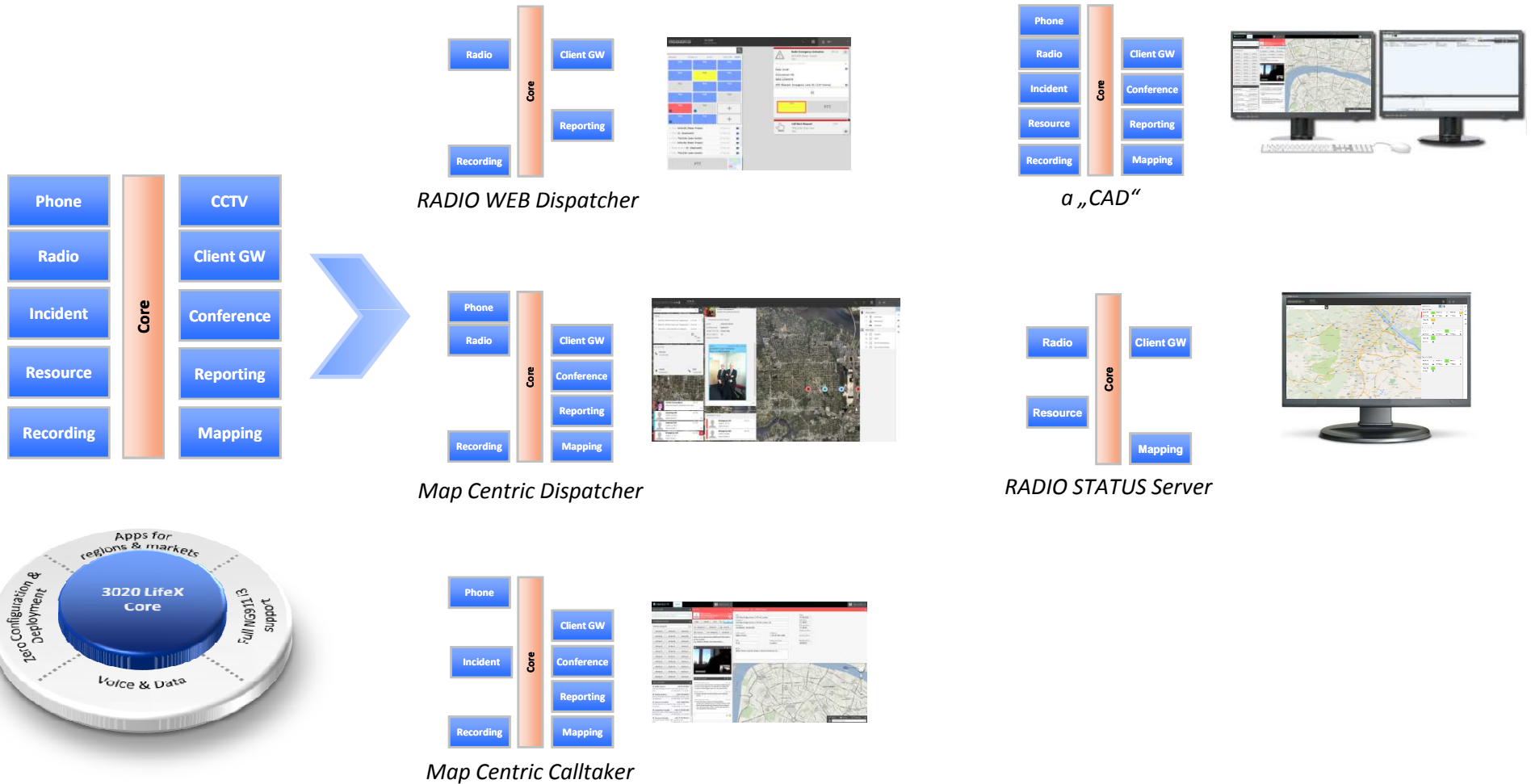


→ IP Networks

- VPN
- EENA ESI Net

→ The envisioned 3020 LifeX packages as of today

A Modular Services approach in providing functionality:





Thank you!



Peter Haberl
FREQUENTIS AG

www.frequentis.com
peter.haberl@frequentis.com
+43 664 608 50 2189

FREQUENTIS