

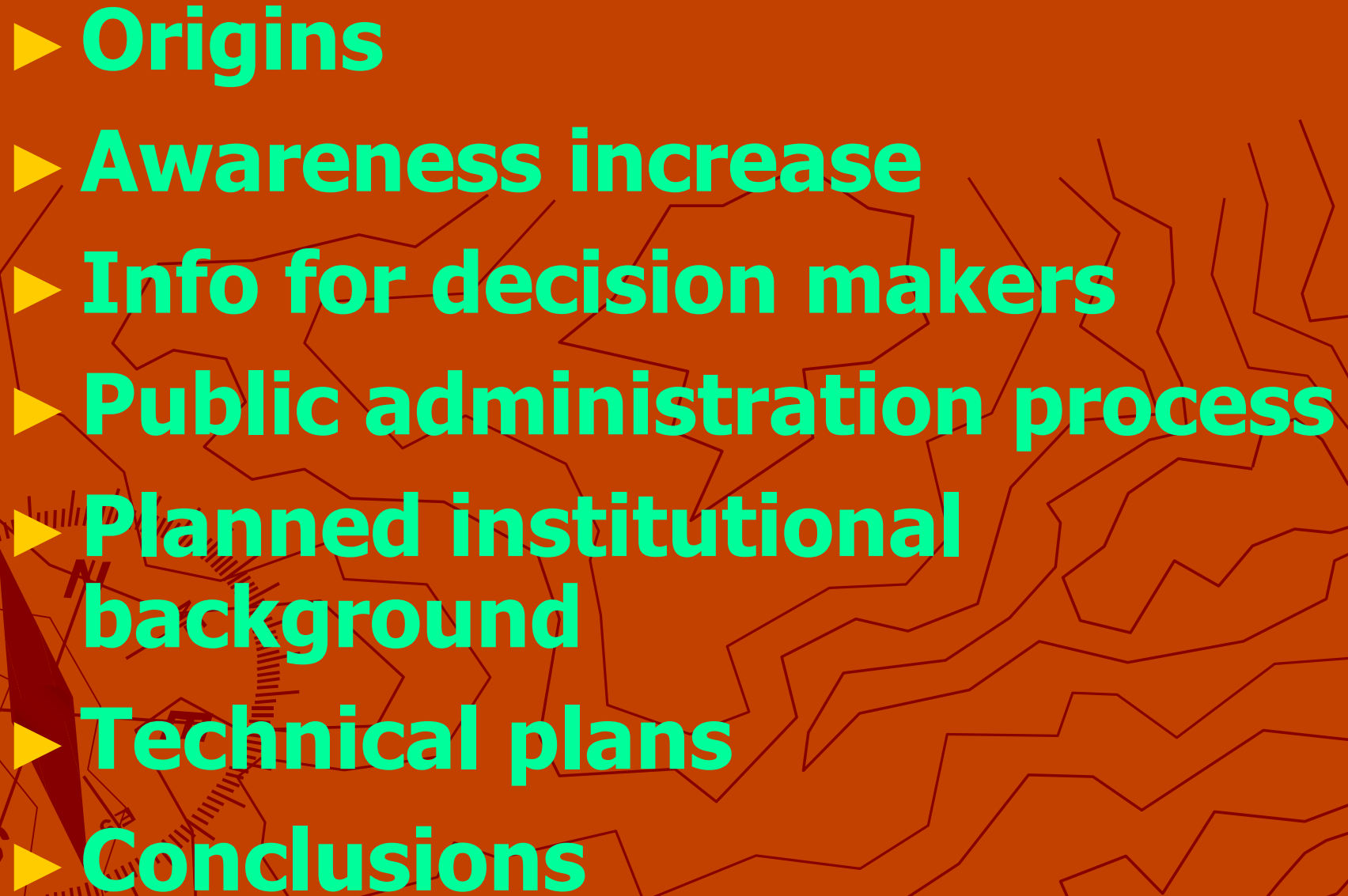


**Joint Meeting of Action Team on GNSS
and GNSS Experts of UN/USA Regional
Workshops and International Meeting
2001-2002**

8-12 December 2003, Vienna, Austria

Development of a national GNSS policy and institutional support in Hungary

Dr. Előd Both
Hungarian Space Office

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- ▶ **Origins**
 - ▶ **Awareness increase**
 - ▶ **Info for decision makers**
 - ▶ **Public administration process**
 - ▶ **Planned institutional background**
 - ▶ **Technical plans**
 - ▶ **Conclusions**

Origins

Triggering factors of increased activity in the field:

- ▶ Direct consequence of the participation at the Second UN/USA Regional Workshop on GNSS in Vienna, November 2001
- ▶ EUPOS initiative (see other presentations)
- ▶ Demands of the users

Awareness increase

- ▶ Textbooks
- ▶ Bimonthly magazine
- ▶ Public lecture
- ▶ Website



Textbooks

- ▶ **Being prepared**
- ▶ **Both to be published in the 1st half of 2004**
- ▶ **Authors: a group of outstanding experts of theory and applications**
- ▶ **Goals:**
 - **Book A.: the first comprehensive textbook in Hungarian language on the GNSS (a few hundred copies)**
 - **Book B.: mainly for everyday users, without too much mathematics (a bit less than 10,000 copies)**

Bimonthly magazine

- ▶ Private venture
- ▶ For professional and hobby users
- ▶ News on
 - equipment
 - application
 - sports, recreation, hobby

GPS MAGAZIN

II. évfolyam, 5. szám
2003. október–november
Ára: 586 Ft
www.gpsmagazin.hu

MADOP
Digitális Ortofotó

LBS ALKALMAZÁSOK
Mobiltelefonos helymeghatározás

KIÁLLÍTÁSOK
INTERGEO 2003; OTK, Szolnok

GPS-SZEL BARANGOLVA
Hippokratész szigetén

Új szereplő:
Mio 339
Digi-Walker

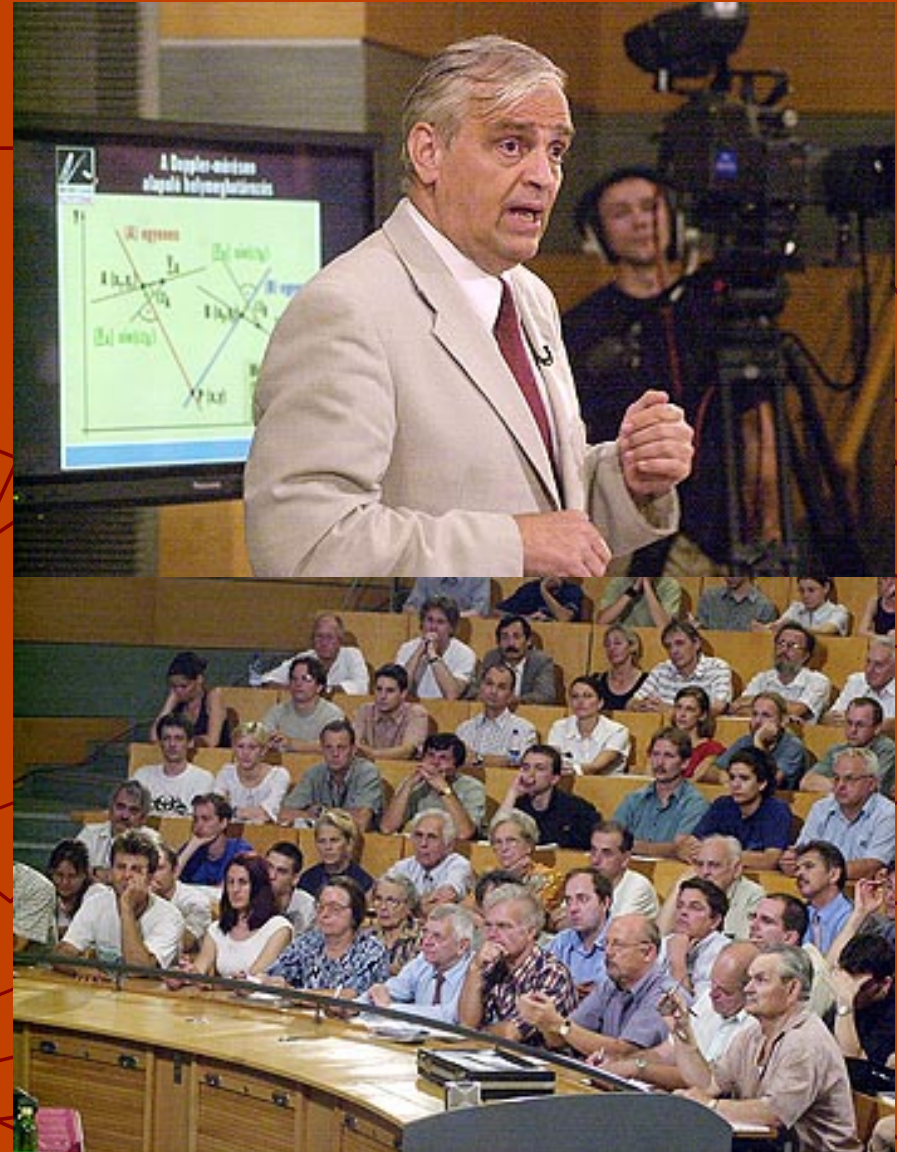
Geodéziai
újdonság:
gyors
és hatékony

**Helymeghatározás
kötött pályán**

Siemens-Desiro:
alapfelszereltség a GPS

Public lecture

- ▶ Element of a long series on sciences
- ▶ Supported by the Academy of Sciences
- ▶ Sponsored by a telecom Co.
- ▶ Broadcasted by 3 tv channels
- ▶ High social impact



Website



- ▶ **Private venture**
- ▶ **News, informations from all over the world, for professional and non-professional users**
- ▶ **Geoinformatics, geodesy, precision farming, marine applications etc.**

Public administration process

- ▶ **Goal: more effective use of available service**
(e.g. higher accuracy)
- ▶ **Inputs, vision**
- ▶ **Role of existing institutions**
- ▶ **Creation of new institutions**
- ▶ **Regular exchange of information**

Key players



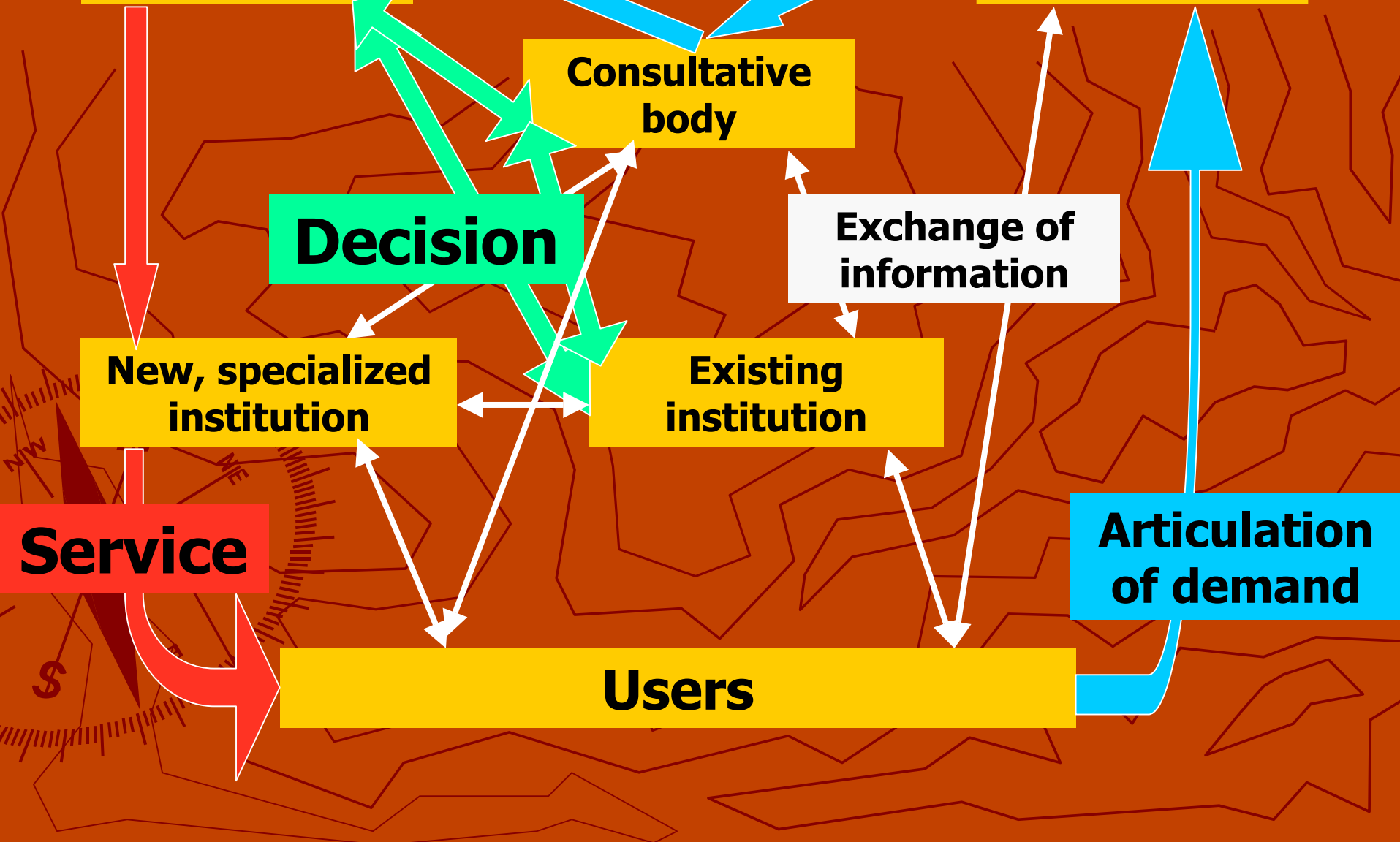
Decision

Exchange of information



Service

Articulation of demand



Info for decision makers (1)

- ▶ Expert and administration level consultations on the use of GNSS
- ▶ Organisers: Min. of Transport (later Min. of Informatics), HSO
- ▶ Participants: from several ministries
- ▶ Conclusion: **Feasibility study** is necessary

Expert level activity

- ▶ **In the meantime: expert level participation in**
 - **UNISPACE III GNSS Action Team**
 - **EUPOS expert group**
- ▶ **Participation at the December 2002 UN/USA GNSS Workshop**
- ▶ **Important outcome: EUPOS is among the UN Workshop recommendations!**

Info for decision makers (2)

- ▶ **Jan. 2002: report on UN/USA Workshop on GNSS issues to the Hungarian Space Board**
- ▶ **Aug. 2002: proposal to the minister of informatics on EUPOS**
- ▶ **Aug. 2003: report to the minister on the outcome of the Feasibility study**
- ▶ **end 2003: preparation of establishing a coordinating body (see later)**

A recommendation of the feasibility study:

**An interministerial forum would be
necessary for**

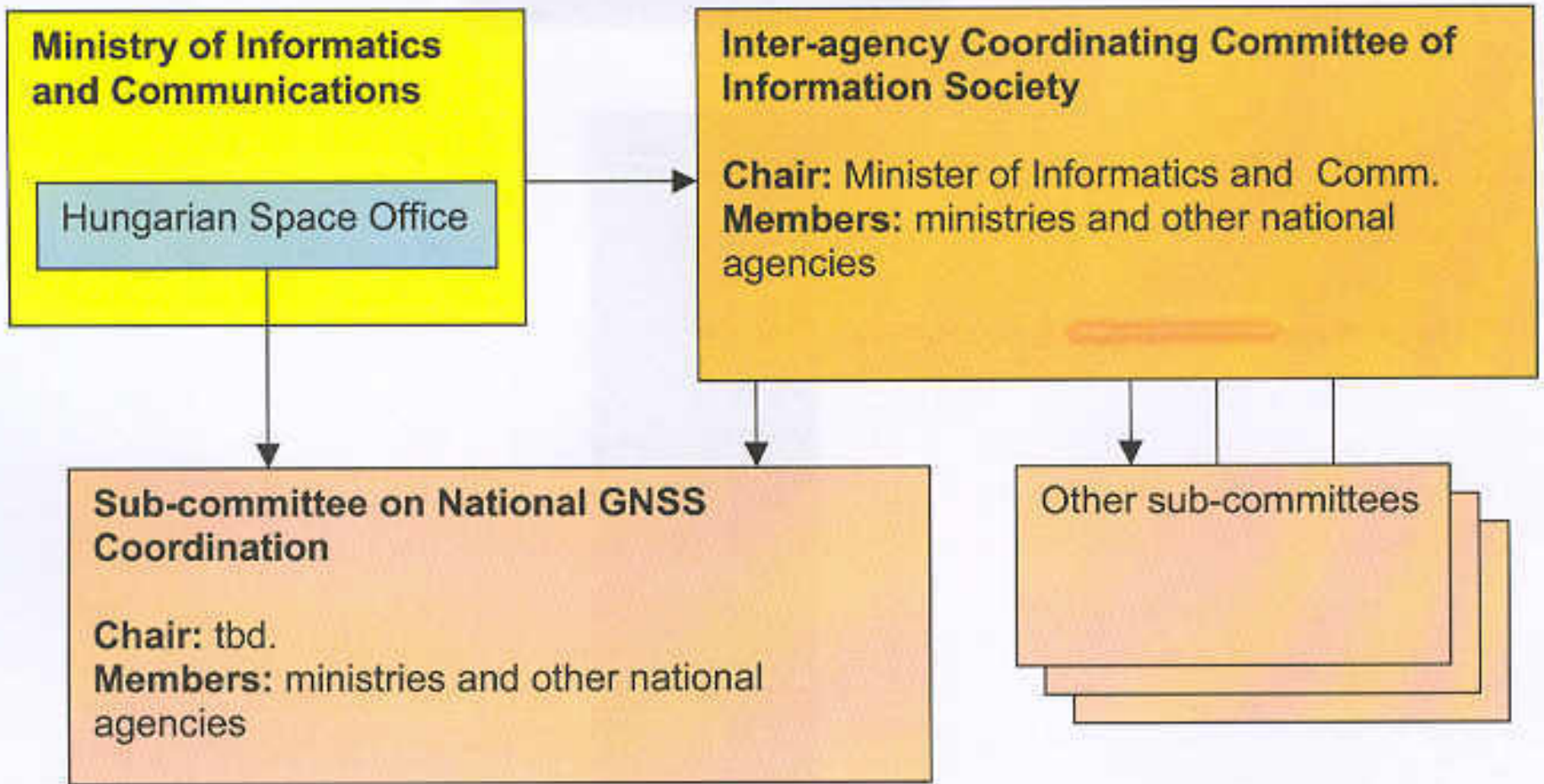
- **coordination,**
- **strategy making,**
- **planning**

**with the participation of all
interested partners**

Partners

- ▶ **Min. of Informatics: existing since 2002 (Information Society Strategy)**
- ▶ **Hungarian Space Office**
- ▶ **Inter-agency Coord. Committee on Information Society (existing, under the chairmanship of the Minister of Informatics)**
- ▶ **Subcommittee on GNSS Coordination (planned, to be created in early 2004)**

Coordinating body



Courtesy prof. I. Fejes

Planned members of the Subcommittee

▶ Administrative level

- Ministries (Informatics, Agriculture, Economy and Transport, Defense, Interior, etc.)
- Gov. Offices (HSO)

▶ Professional level: representatives of

- industry (users)
- experts
- Service center (if established)
- Info centre(s)

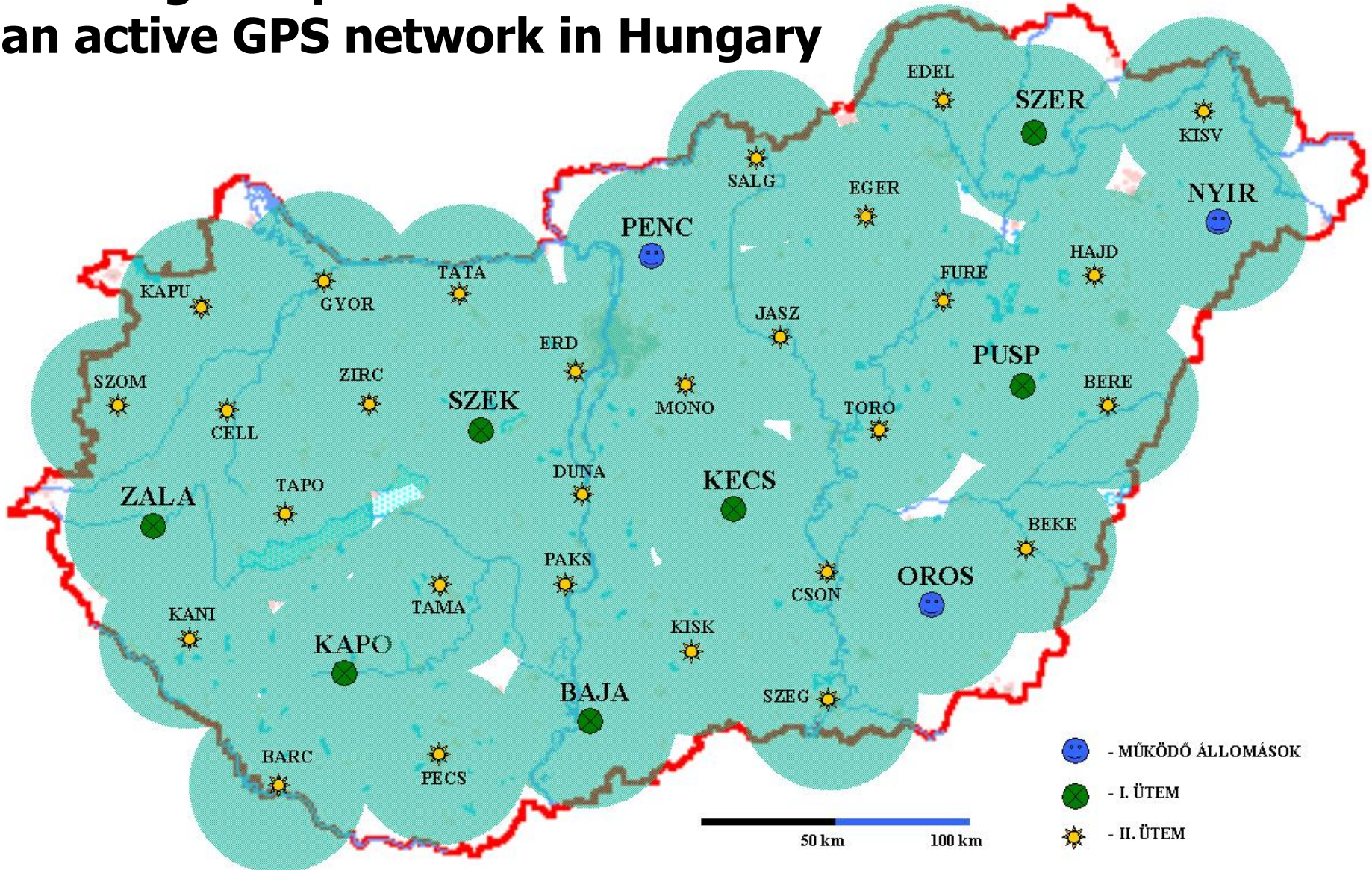
A recommendation of the feasibility study:



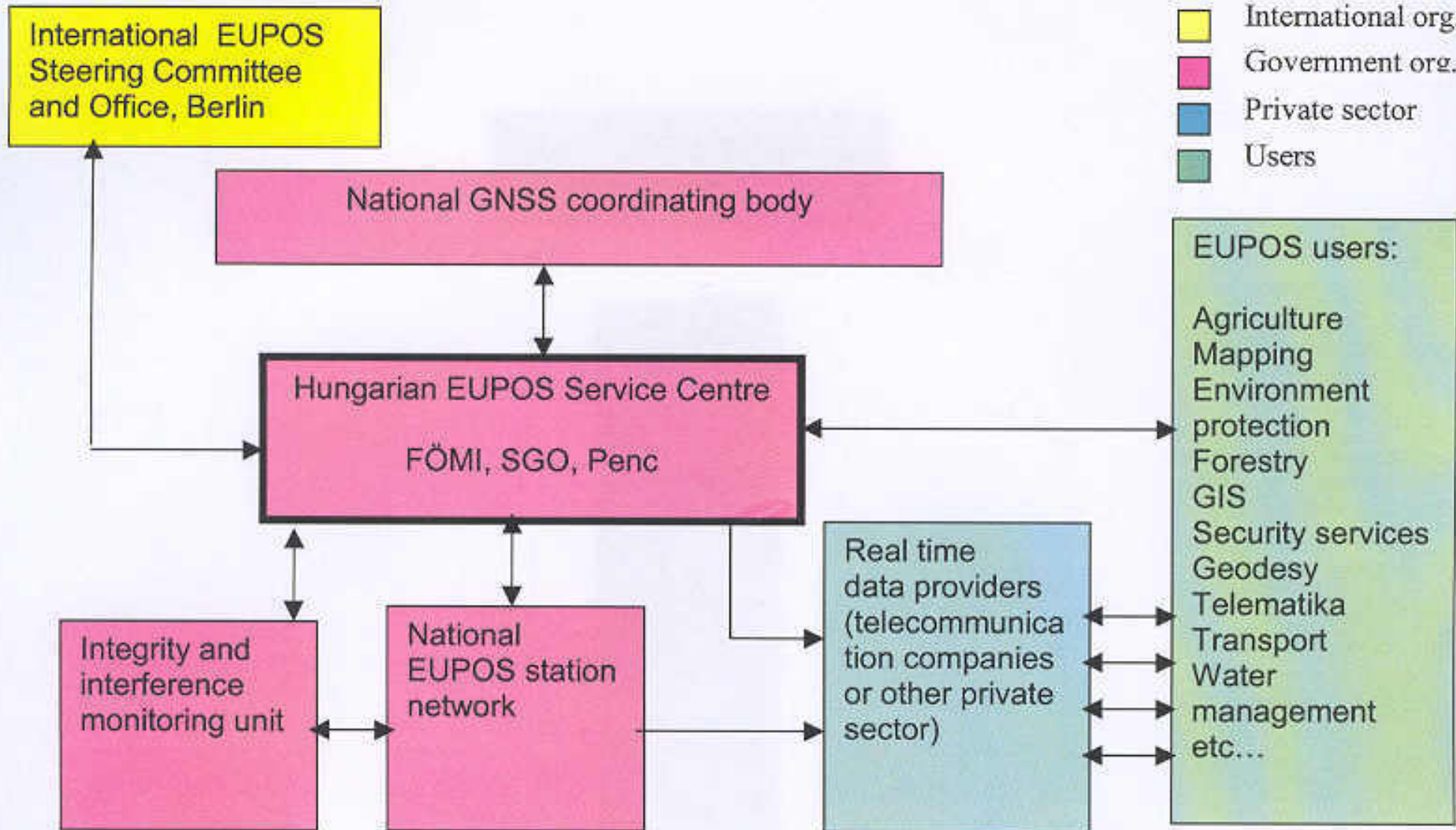
Introducing EUPOS in Hungary would be advantageous

- planning the network of stations
- establishing a service center (on the basis and expertise of an existing institution!)

Existing and planned stations of an active GPS network in Hungary

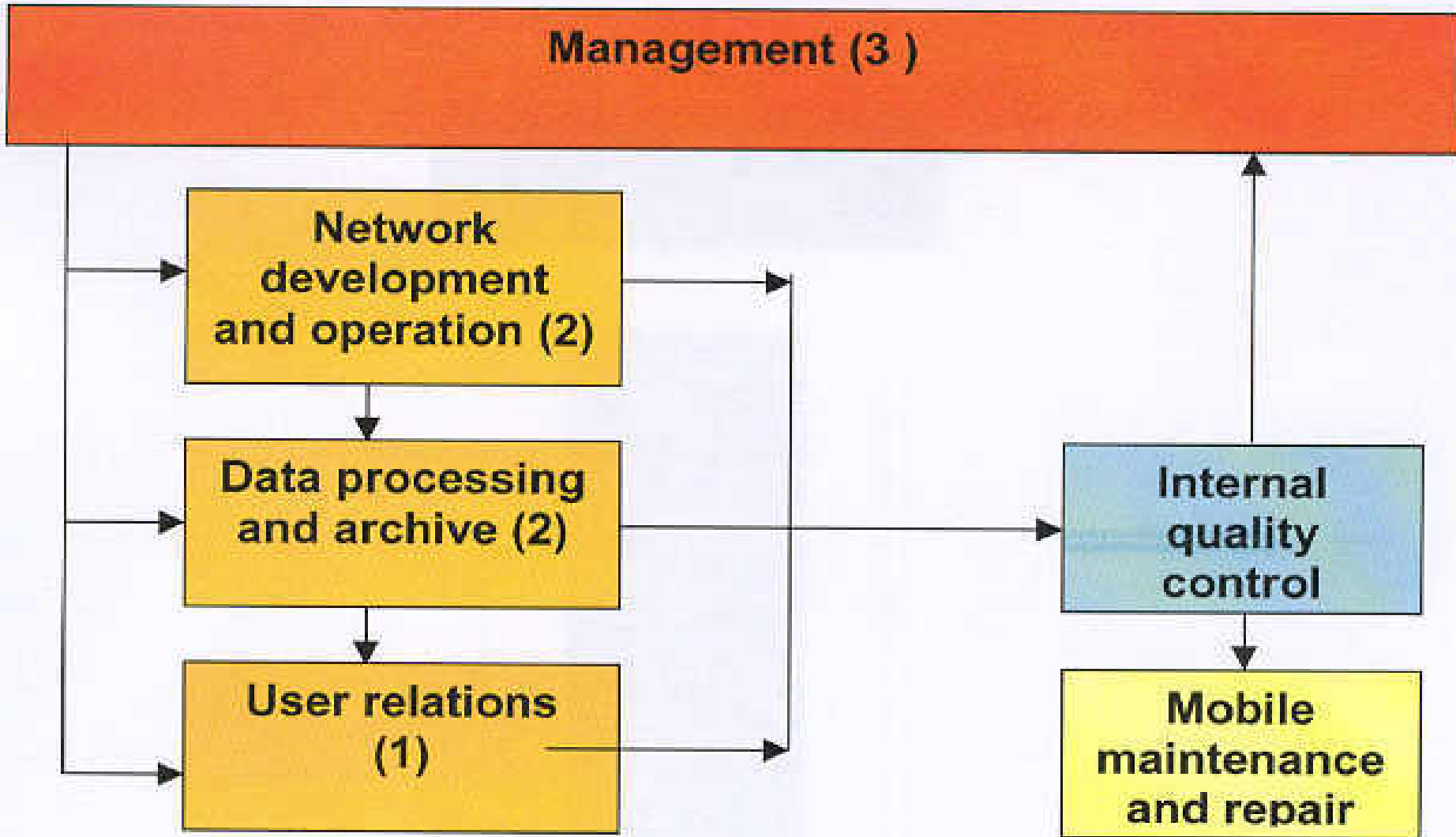


The Hungarian EUPOS organisational structure



Courtesy prof. I. Fejes

Structure of the Service Centre



Funding

- ▶ **Internal sources – state budget, perhaps from different ministries**
- ▶ **Public private partnership**
- ▶ **External sources – possible EU support**

Conclusions (1)

Role of UN:

- ▶ GNSS conferences have a positive, triggering influence
- ▶ Recommendation by UN GA could be also beneficial

BUT:

- ▶ Technical harmonisation is not at UN level
- ▶ Definition of tasks, implementation is national responsibility

Conclusions (2)

Role of national public administration:

- ▶ **Realize the importance of GNSS**
- ▶ **Promote the wide use of the available services**
- ▶ **Let the market expand**
- ▶ **Define the tasks beyond the scope of the private sector and users**
- ▶ **If necessary, create an additional infrastructure, for the benefit of all local users, i.e. the people**

