

EUPOS®

European Position Determination System

Brief Status Report

Gerd Rosenthal

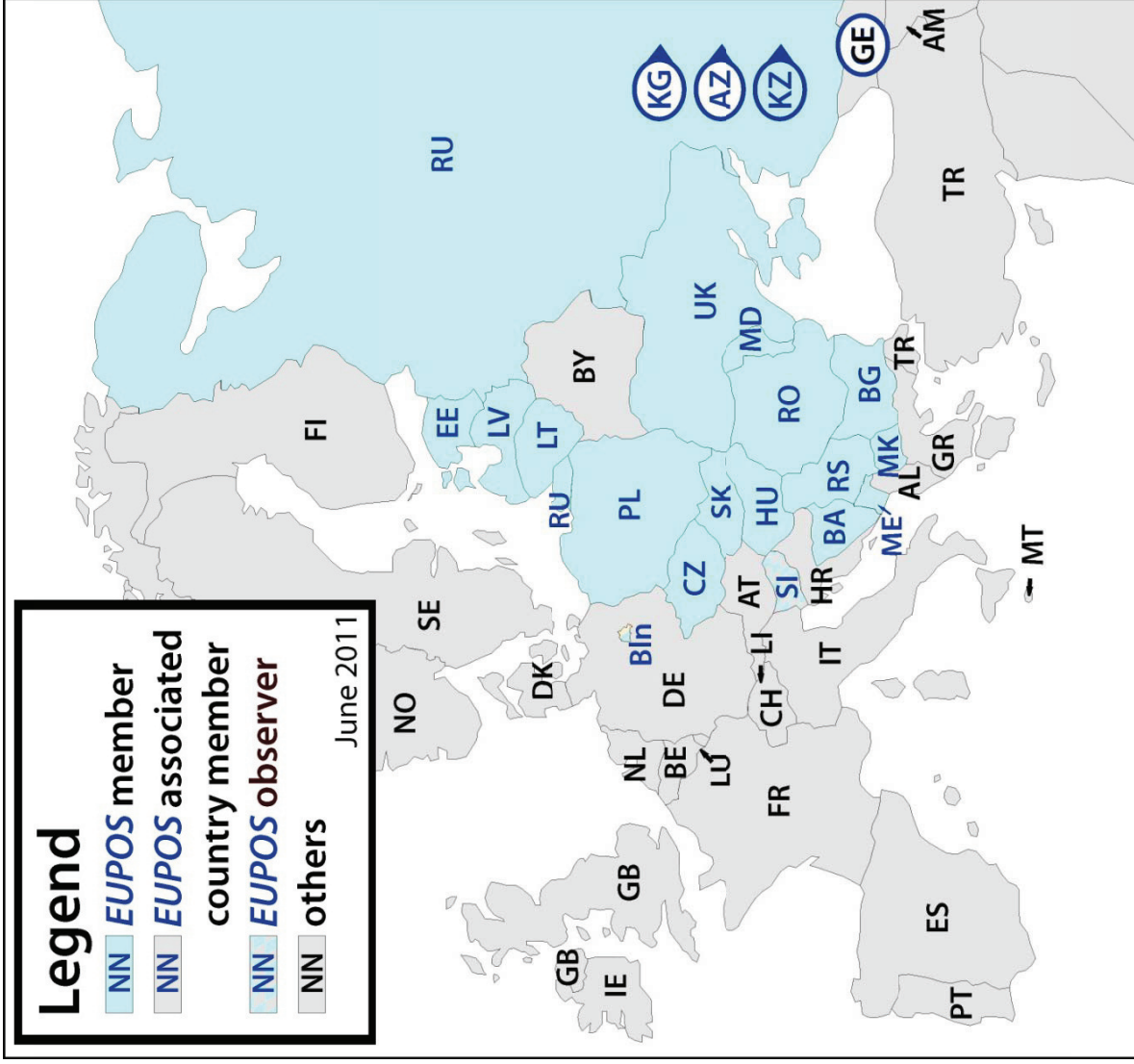
Office of the International *EUPOS*® Steering Committee

c/o Senate Department for Urban Development, State of Berlin, Germany

**Sixth Meeting of the
International Committee on Global Navigation Satellite
Systems, Tokyo, Japan, 4th – 9th September 2011**

EUPOS members

- Bosnia and Herzegovina
- Bulgaria
- Czech Republic
- German state Berlin (ISCO)
- Montenegro
- Estonia
- Hungary
- Kazakhstan
- Latvia
- Lithuania
- Republic of Macedonia
- Moldova
- Poland
- Romania
- Russian Federation
- Serbia
- Slovak Republic
- Ukraine
- Slovenia (observer)
- Azerbaijan, Kyrgyzstan and Georgia will apply *EUPOS* associated country membership in October 2011



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Office of the International EUPOS® Steering Committee

Slide 2

Tokyo, Japan, 4-9 September 2011

As at 1st June 2011

European Position Determination System

EUPOS Country	Area [km²]	planned RS	realised RS	EUPOS Country	Areal [km²]	planned RS	realised RS
BA	51,000	26	1	MK	25,434	14	14
BG	110,950	36	36	MD	33,700	15	2
CZ	78,870	27	27	PL	323,520	98	98
DE/ Berlin	891	4	4	RO	237, 500	73	58
EE	45,220	17	9	RU	17,075,400	238+	224
HU	93,030	36	35	RS	88,360	32	32
KZ	2,724,900	500	30	SI (observer)	20,270	15	15
LV	64,600	23	23	SK	46,035	25	23
LV/ Riga City	307	5	5	UA	603,700	30	8
LT	65,300	25	25	ALL	21,926,487	1240+	476

Changes of the *EUPOS* Terms of Reference (excerpt of §5)

Members of the ISC are:

- (a) One representative from each *EUPOS* member country. In exceptional cases a country may be granted more than one representative should this be advisable due to that country's particular situation. They shall, nevertheless, hold a common position in the ISC decision-making process;
- (b) Representatives of other states, organizations, institutions, companies etc. which joined the ISC at its founding;
- (c) The head of the ISC Office (ISCO);

(d) Non-European countries can apply for the status “associated country”, which allows participation in all *EUPOS* conferences and activities. However countries which have associated country status can not vote in the *EUPOS* decision making. Associated countries receive full membership if the DGNSS infrastructure will be established and fulfill the *EUPOS* Standards.

EGNOS and EUPOS intend to co-operate

Just before the "3rd International Symposium on Global Navigation Satellite Systems, Space-Based and Ground-Based Augmentation Systems and Applications" was held in Brussels, Belgium, 29-30 November 2010, the European GNSS Agency (GSA) and the Office of the International *EUPOS* Steering Committee got in contact. During a follow-up meeting in Berlin held in March the features and applications of the two systems were discussed with the aim to identify a co-operation to maximise public benefits to European citizens.

EGNOS and EUPOS

EGNOS has become a basic tool for more precise positioning than with GPS alone. Its application for various positioning tasks is getting more and more widely used. While covering most of the European territory, EGNOS is laced with some limitations regarding coverage toward parts of Eastern European countries. Ground based augmentation system *EUPOS* has become a basic tool for geodetic applications, cadastre and land surveying in Eastern European countries. *EUPOS* is a growing network; however, lacing some white spots in the GSM limited coverage areas.

Complementarities of EGNOS and EUPOS

While EUPOS is providing centimetre precision EGNOS performs in meter/sub-meter accuracy. Both systems are publicly managed and not competing. Therefore, the systems are complementary, with EGNOS enlarging the user base as an entry solution but also "sophisticating" this user base to higher precision solutions.

The GSA Market Development -in coordination with the European Commission -and EUPOS have concluded that a co-operation between EGNOS and EUPOS could be beneficial for EU economy and regional development:

EUPOS could be an alternative for more applications (e.g. farmers in precise agriculture) beyond the edge of the EGNOS coverage area.

EGNOS can help to some white spots where EUPOS is not yet operable. More options and next steps for co-operation are currently being investigated.

ICG and *EUPOS*

The International Committee on Global Navigation Satellite Systems (ICG) and *EUPOS* have been agreed that *EUPOS* would try to bring together all regional geodetic reference systems and frames in the Berliner GNSS Symposia..

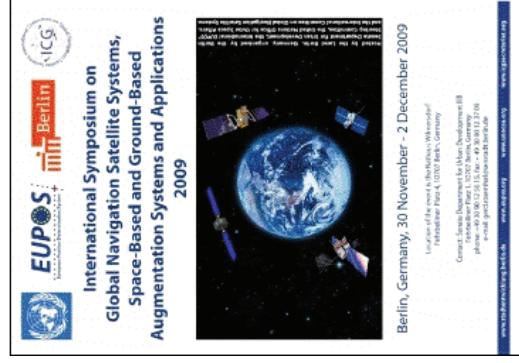
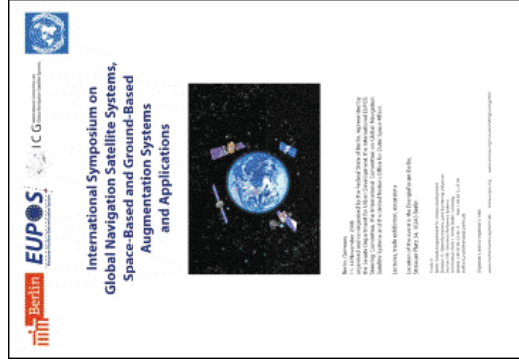
International Symposium on Global Navigation Satellite Systems, Space-Based and Ground-Based Augmentation Systems and Applications 2011



Berlin, Germany, 12 –13 October 2011



Further publication of EUPOS and Berlin are available



Thank you for your attention!

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