

THE INTERREG IIIA PROJECT “TRANS-NATIONAL SEISMOLOGICAL NETWORK IN THE SOUTH-EASTERN ALPS”

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(ARSO) Agencija Republike Slovenije za okolje, urad za seizmologijo, Ljubljana, Slovenija

(ZAMG) Zentralanstalt für Meteorologie und Geodynamik, Hauptabteilung Geophysik, Wien, Österreich



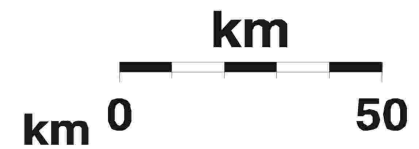
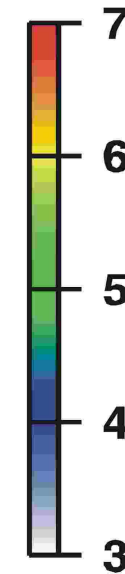
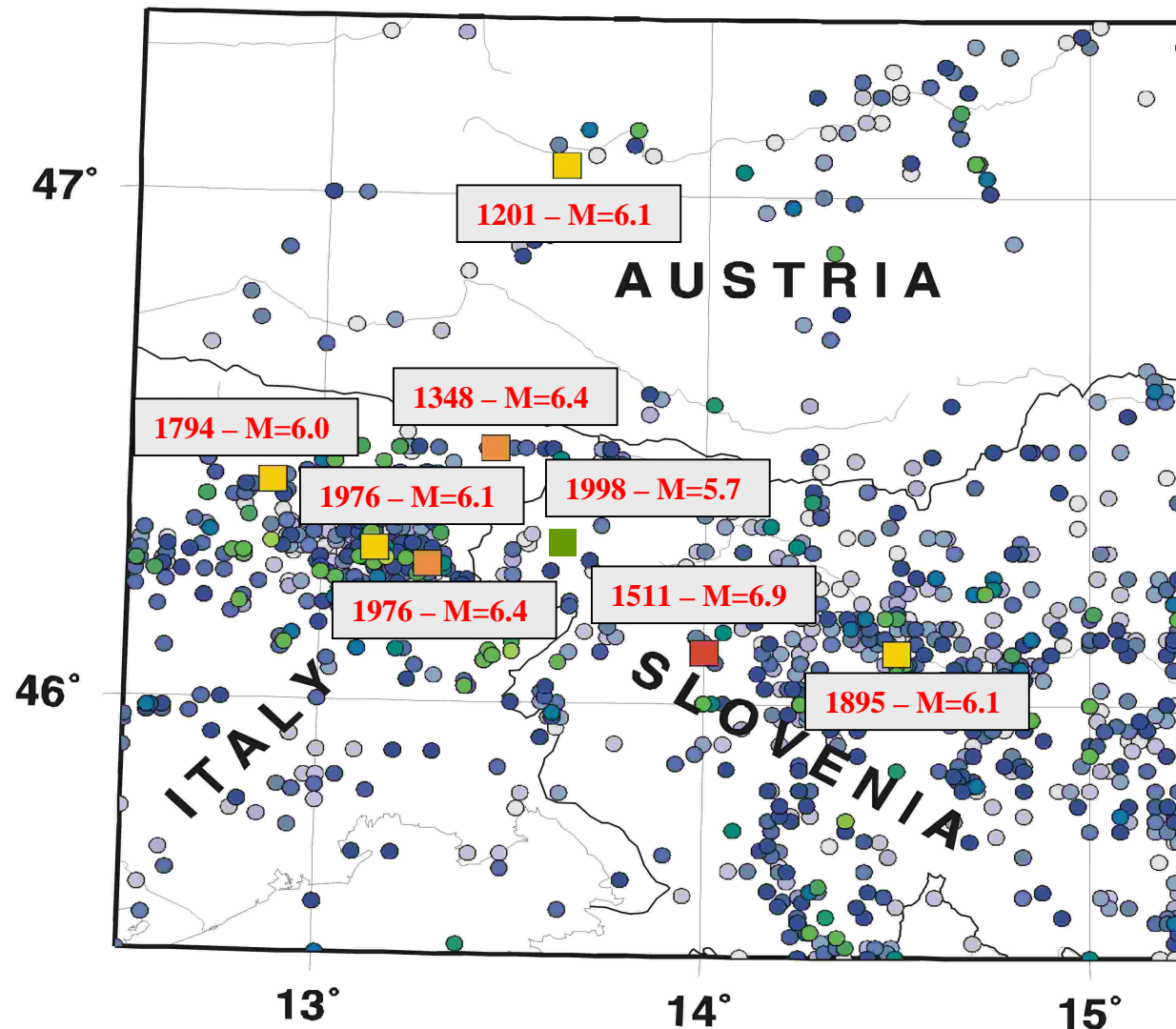
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Various Real-Time or Near Real-Time Networks in the Area

- Austrian national BB network, ZAMG
- Friuli Veneto SP network, OGS
- Friuli VG accelerometric network, DST
- NE Italy BB Network, OGS & DST
- Slovene national BB network, ARSO

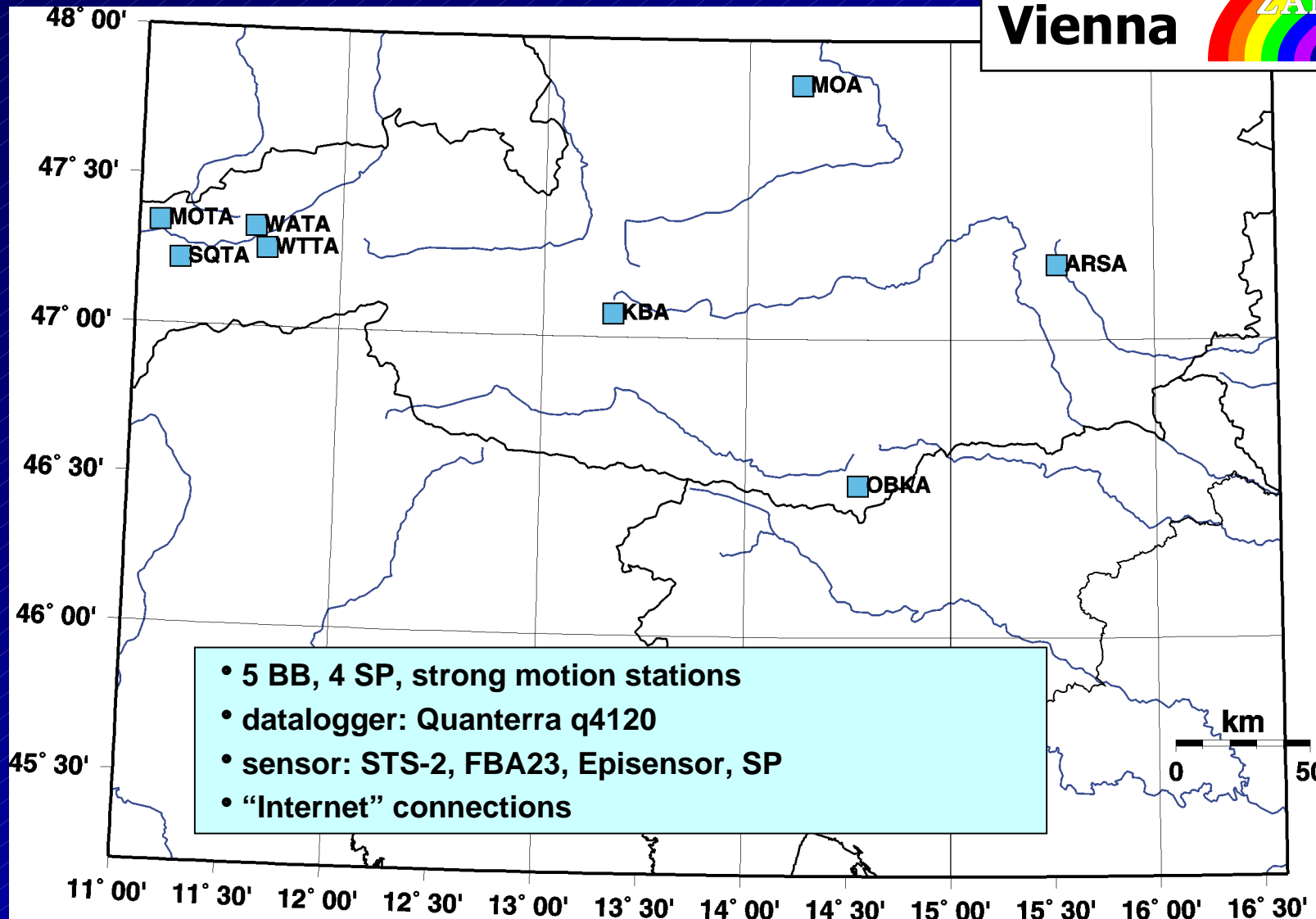
over the last 26 years these networks have deployed very heterogeneous equipment and data collection and transmission modes. All are still being built / updated.



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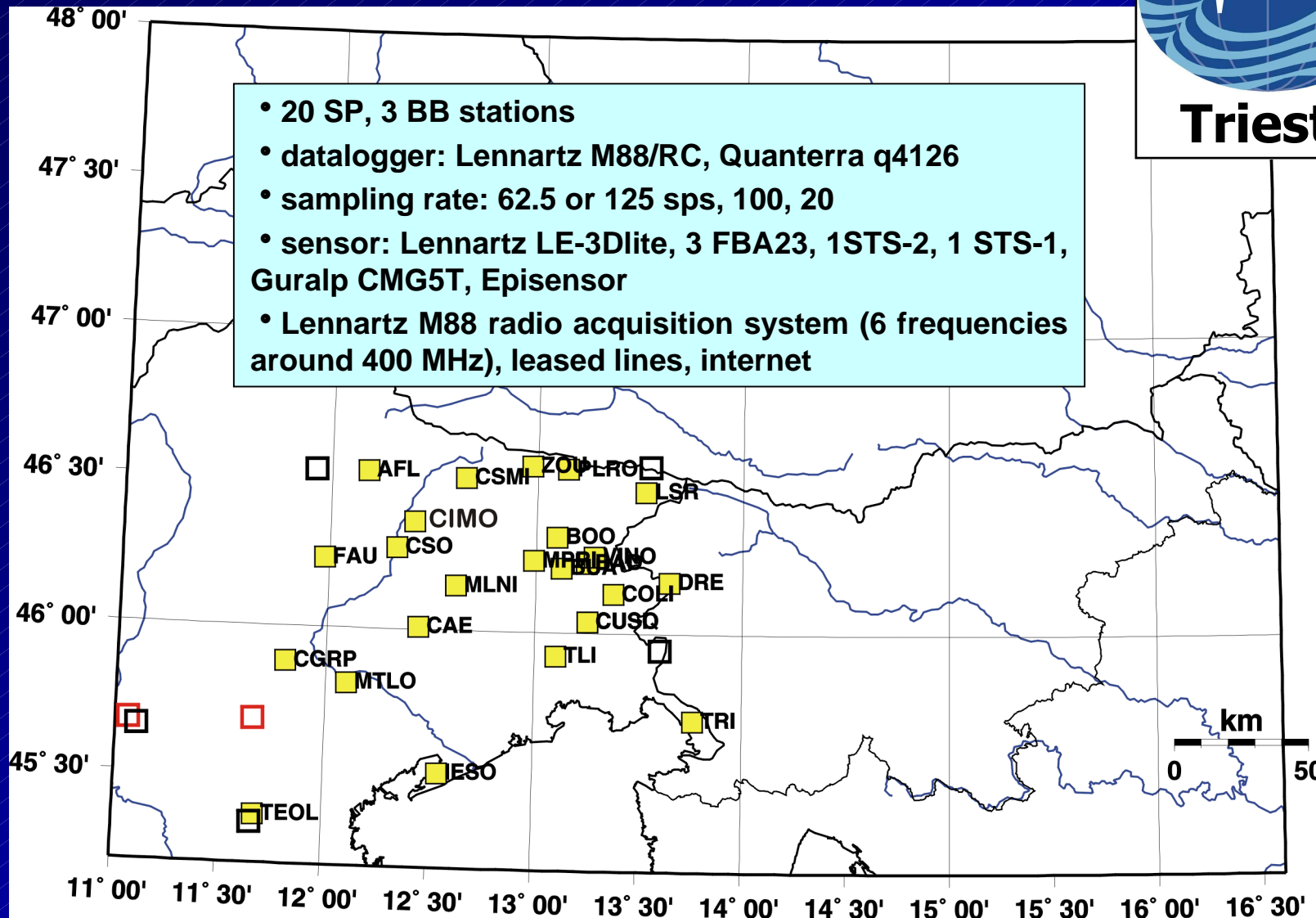


ZAMG
Vienna



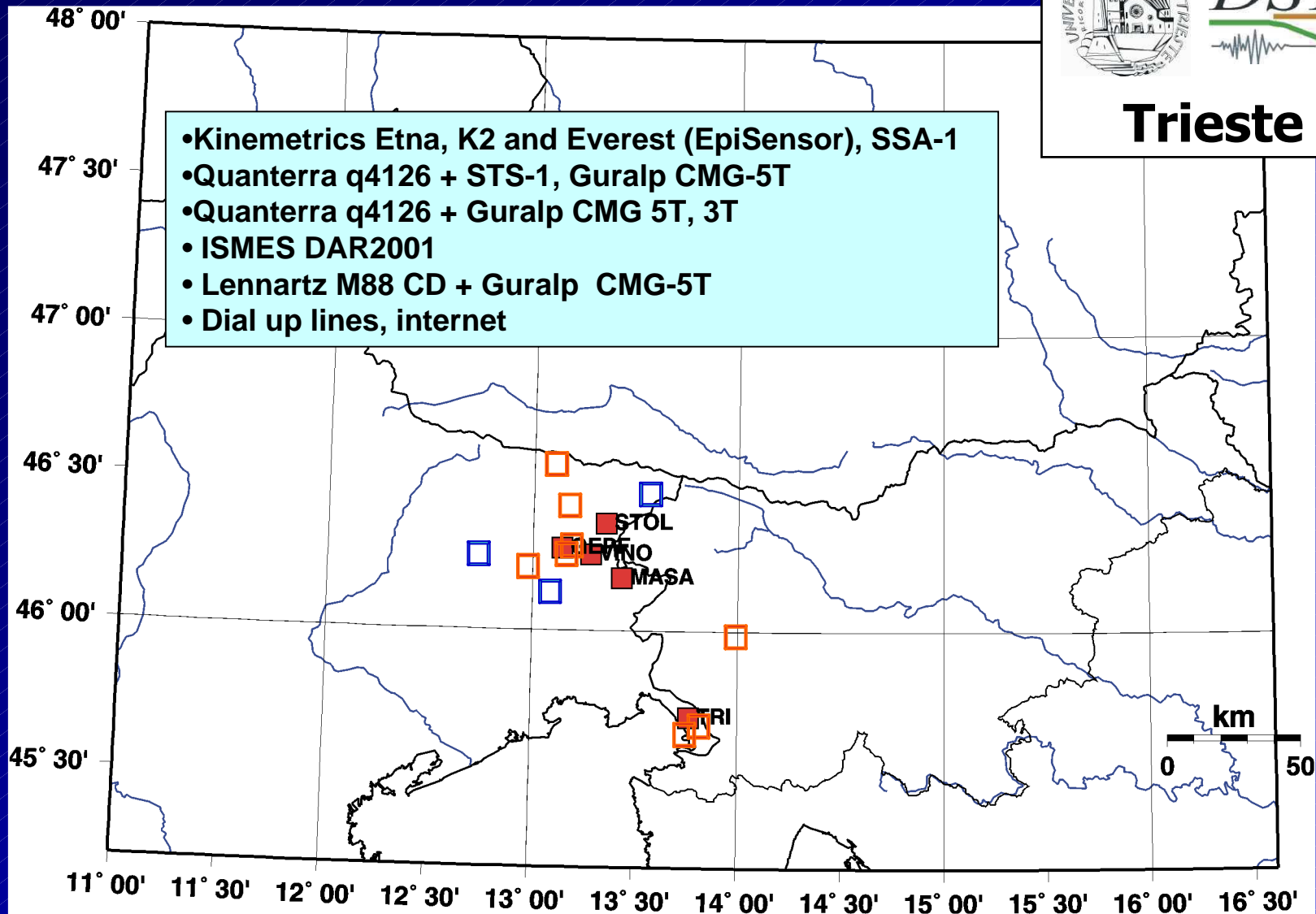
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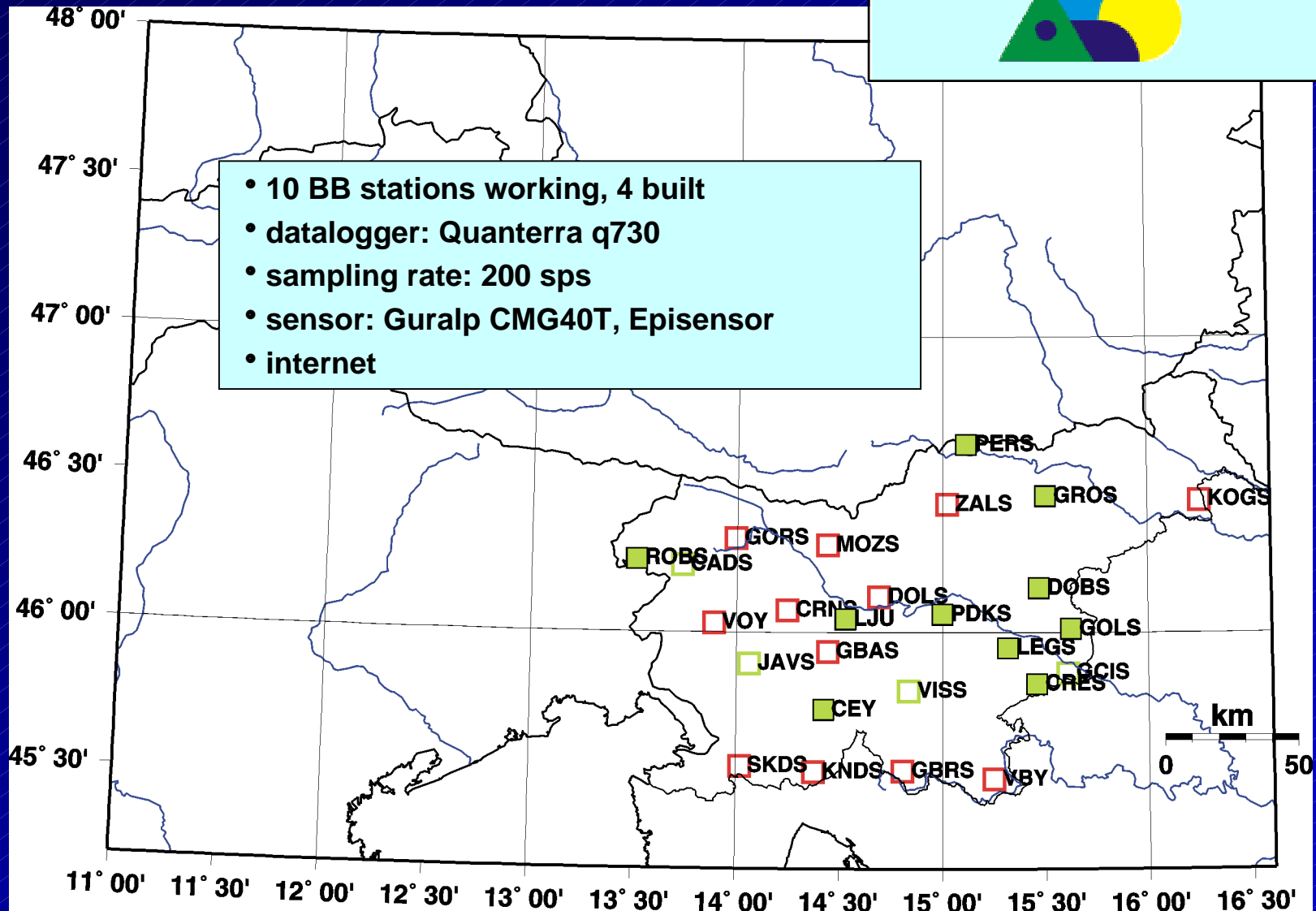




ARSO, Ljubljana



- 10 BB stations working, 4 built
- datalogger: Quanterra q730
- sampling rate: 200 sps
- sensor: Guralp CMG40T, Episensor
- internet



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**ACCORDO INTERNAZIONALE PER LO SCAMBIO DATI SISMOLOGICI IN
“TEMPO-REALE” NELLA REGIONE ALPE-ADRIA**

**MEDNARODNI SPORAZUM O IZMENJAVI SEIZMOLOŠKIH PODATKOV V
“REALNEM ČASU” NA PODROČJU ALPE-JADRAN**

**INTERNATIONALE VEREINBARUNG FÜR DEN AUSTAUSCH VON
SEISMOLOGISCHEN DATEN IN ECHT-ZEIT IN DER ALPEN-ADRIA REGION**

**INTERNATIONAL AGREEMENT FOR “ REAL TIME” SEISMOLOGICAL DATA
EXCHANGE IN THE ALPE-ADRIA REGION**

Dipartimento di Scienze della Terra, Università degli Studi di Trieste, Trieste, Italia

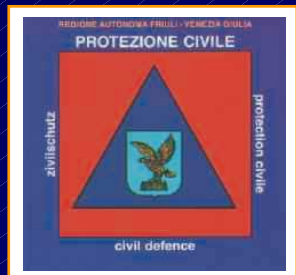
Istituto Nazionale di Oceanografia e di Geofisica Sperimentale – OGS, Italia

Agencija Republike Slovenije za okolje, urad za seizmologijo, Ljubljana, Slovenija

**Zentralanstalt für Meteorologie und Geodynamik, Hauptabteilung Geophysik,
Wien, Österreich**

NOVEMBER 2001



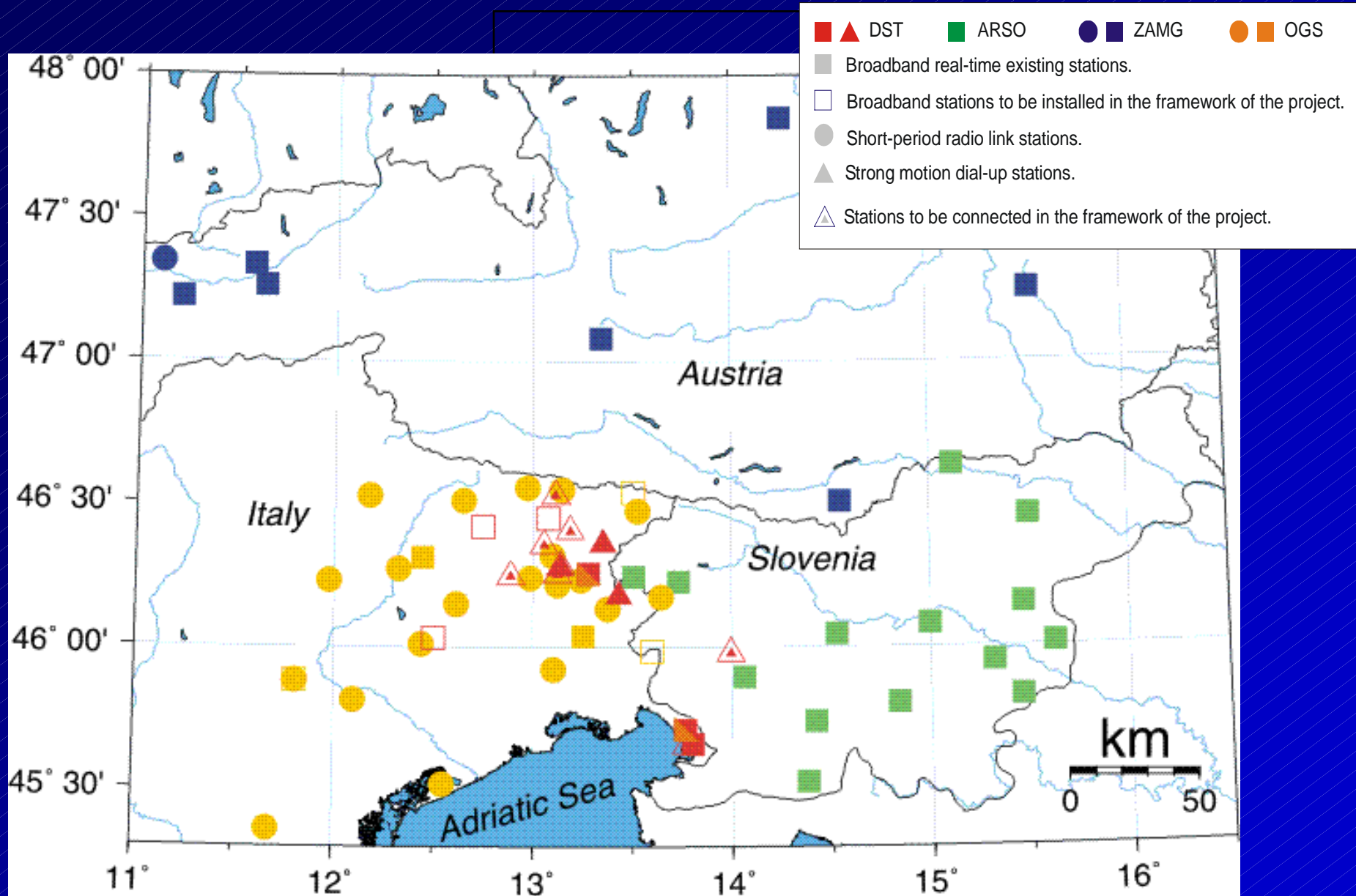


**THE INTERREG IIIA ITALIA-AUSTRIA 2000-2006
PROJECT
“TRANS-NATIONAL SEISMOLOGICAL NETWORK
IN THE SOUTH-EASTERN ALPS”
2002-2005**



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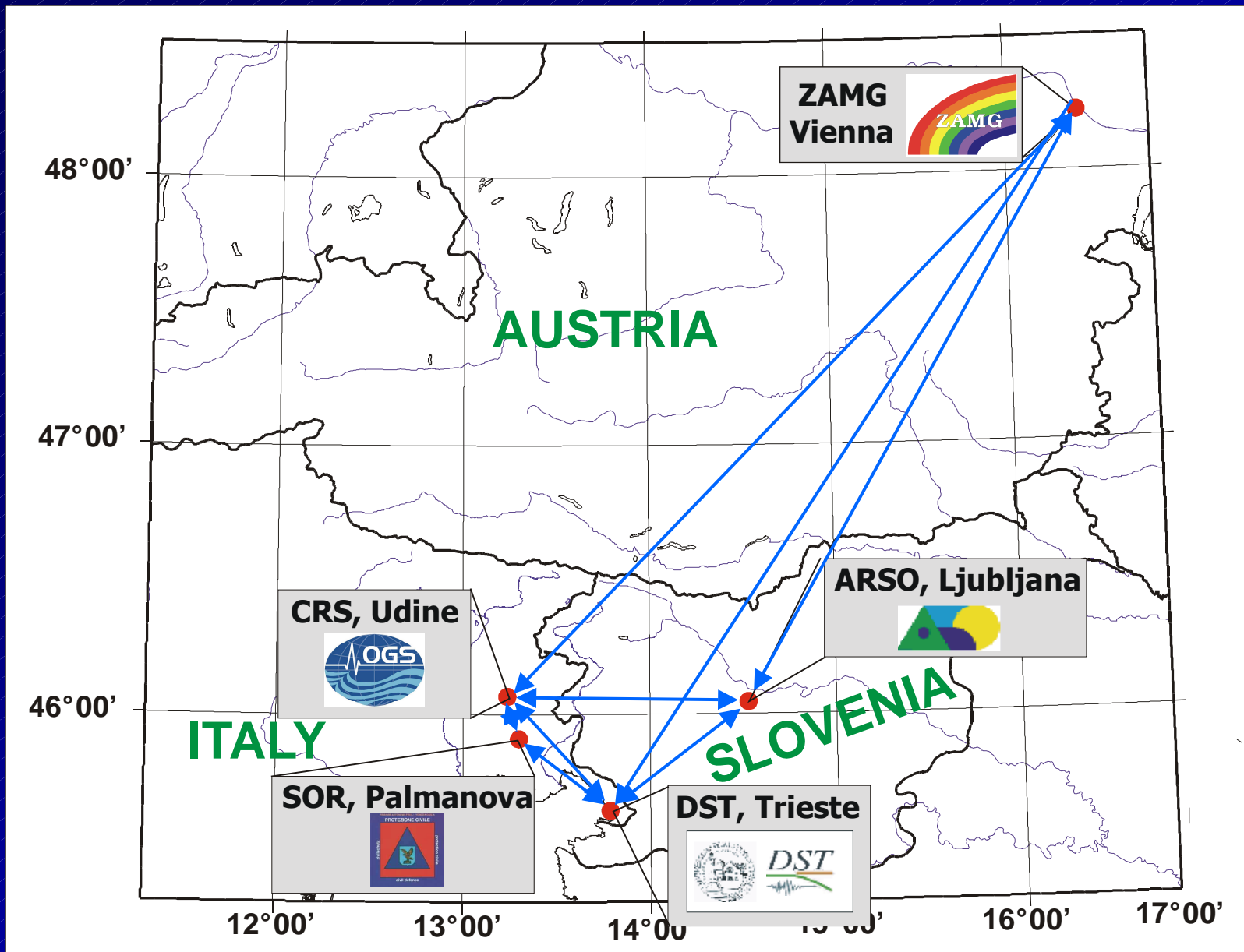
PROJECT GOALS

- Establish/upgrade different data centers located at the institutions running the networks in the different countries;
- Selection and implementation of multiple/redundant data connection systems between the remote stations and the data centers (e.g., satellite, radio telemetry, GPRS, GSM, phone line, etc.);
- Improving network geometry for lowering earthquake detection threshold near the border(s);
- Mobile network scheduling and operation in case of large earthquakes (e.g., identification of potential station sites, planing and organization of temporary data gathering centers);
- Sensor calibration for accurate and consistent determination of magnitude and source parameters.
- Network state of health and configuration exchange scheme implementation.



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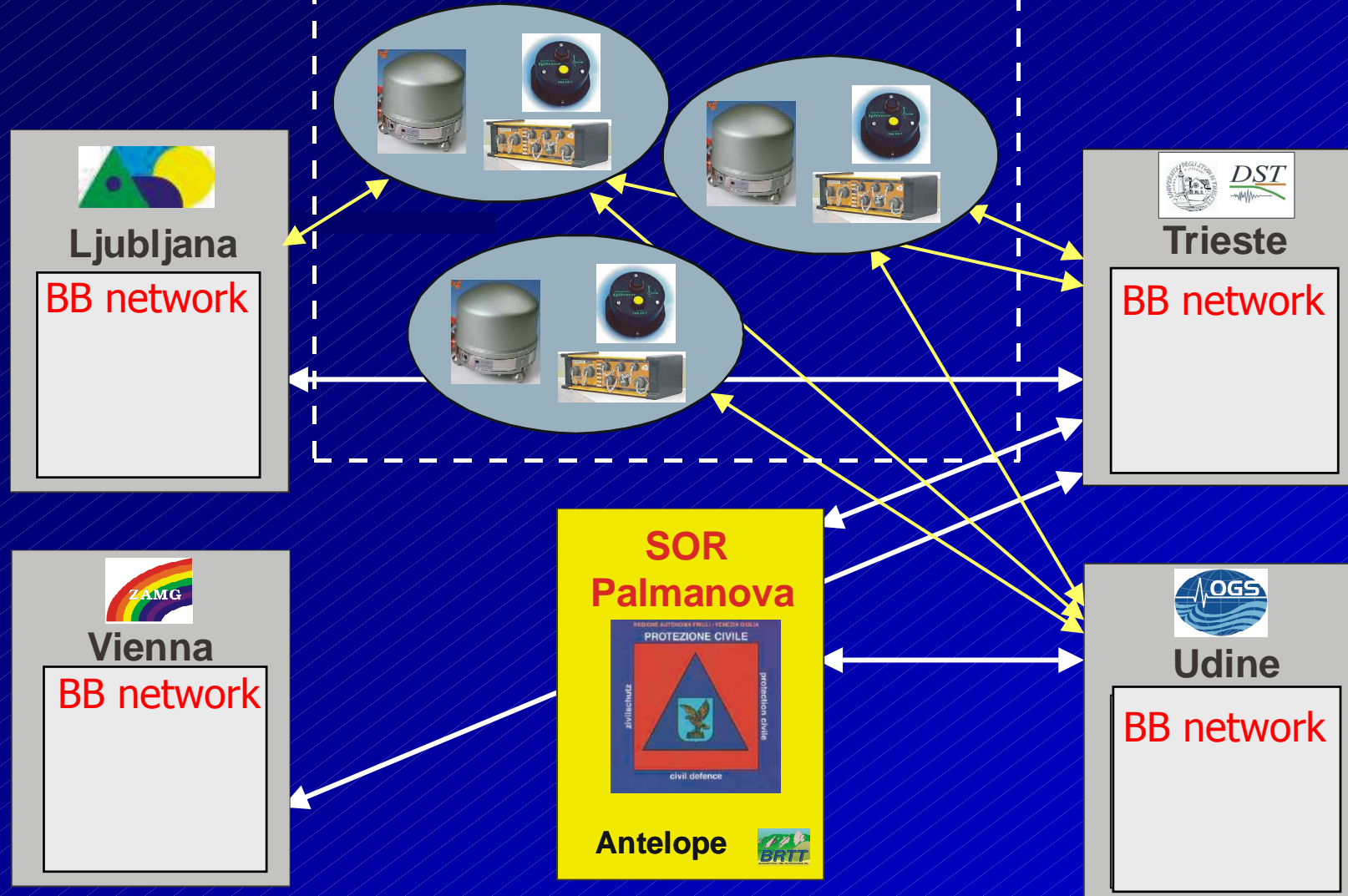




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Friuli Venezia Giulia BB stations

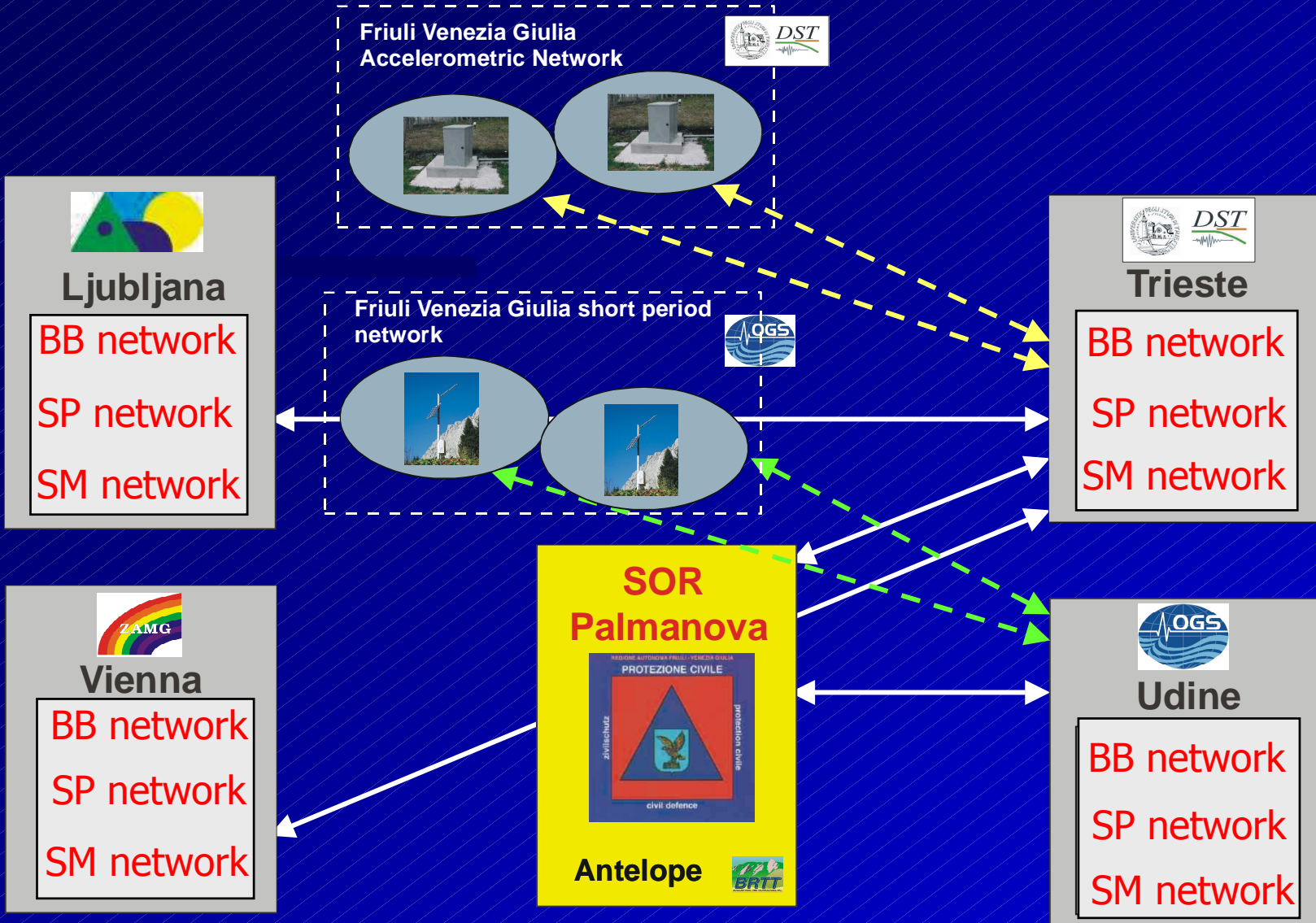


Datacenter to datacenter real-time connections.
 Station to datacenter

Preliminary location, within 1 minute from event (real-time BB data).



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Dial-up connections
 Radio links

Final automatic location, within 20 minutes from event (real-time BB data, SP data, SM data).



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Trieste



ARSO
OGS

TRI
Quanterra 4126

orb - output

qt2orb

K22orb

ARSO Ljubljana

Antelope
LJU, CEY, CRES

orb2orb

Antelope
TRI, RAF, VINO, CUSQ, CIMO, RSFVG, LJU, CEY, CRES, OBKA, ARSA, AQU

slink2orb

SeisComP
VINO, AQU

slink2orb

OGS/CRS Udine

Antelope
CUSQ, CIMO, RSFVG

SeisComP
CUSQ, CIMO, RSFVG

ZAMG Vienna

Antelope
OBKA, ARSA

orb2orb

Seedlink (dial-up)

SeisComP

VINO
Quanterra 4126

seedlink

seedlink - output

INGV Roma

SeisComP
AQU

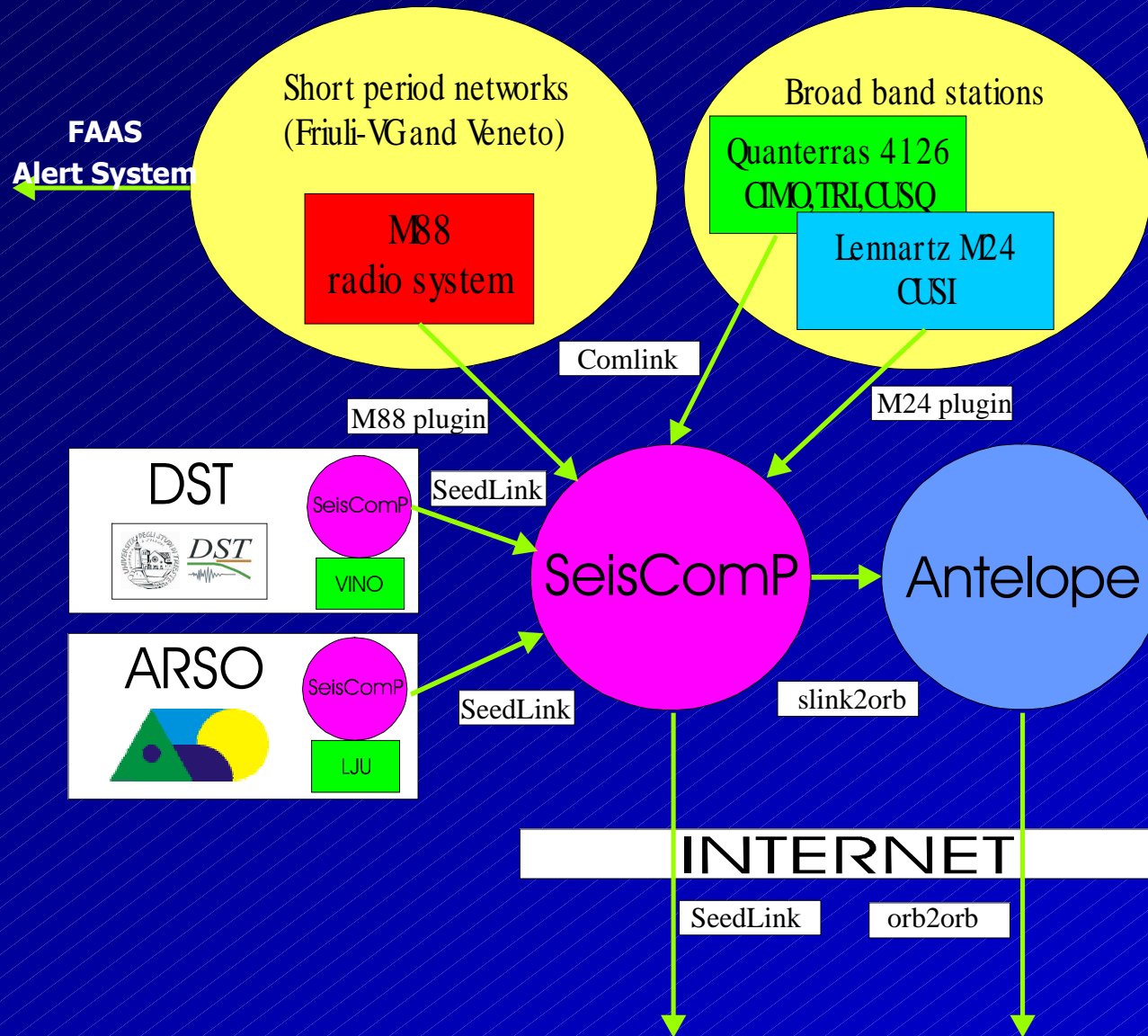


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Udine



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ZAMG
DST
others

ZAMG

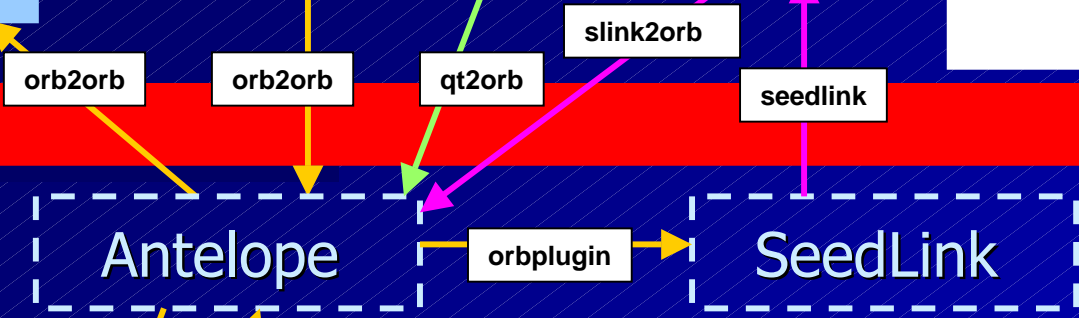
TRI

OGS/
CRS

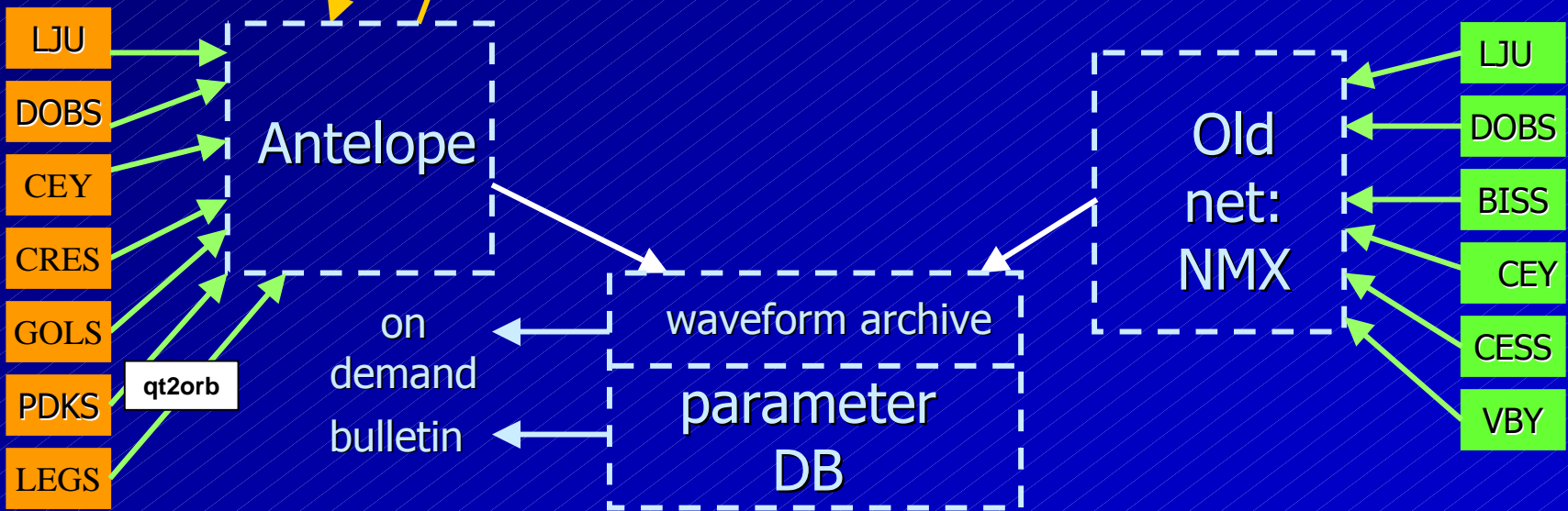
ARSO, Ljubljana



firewall

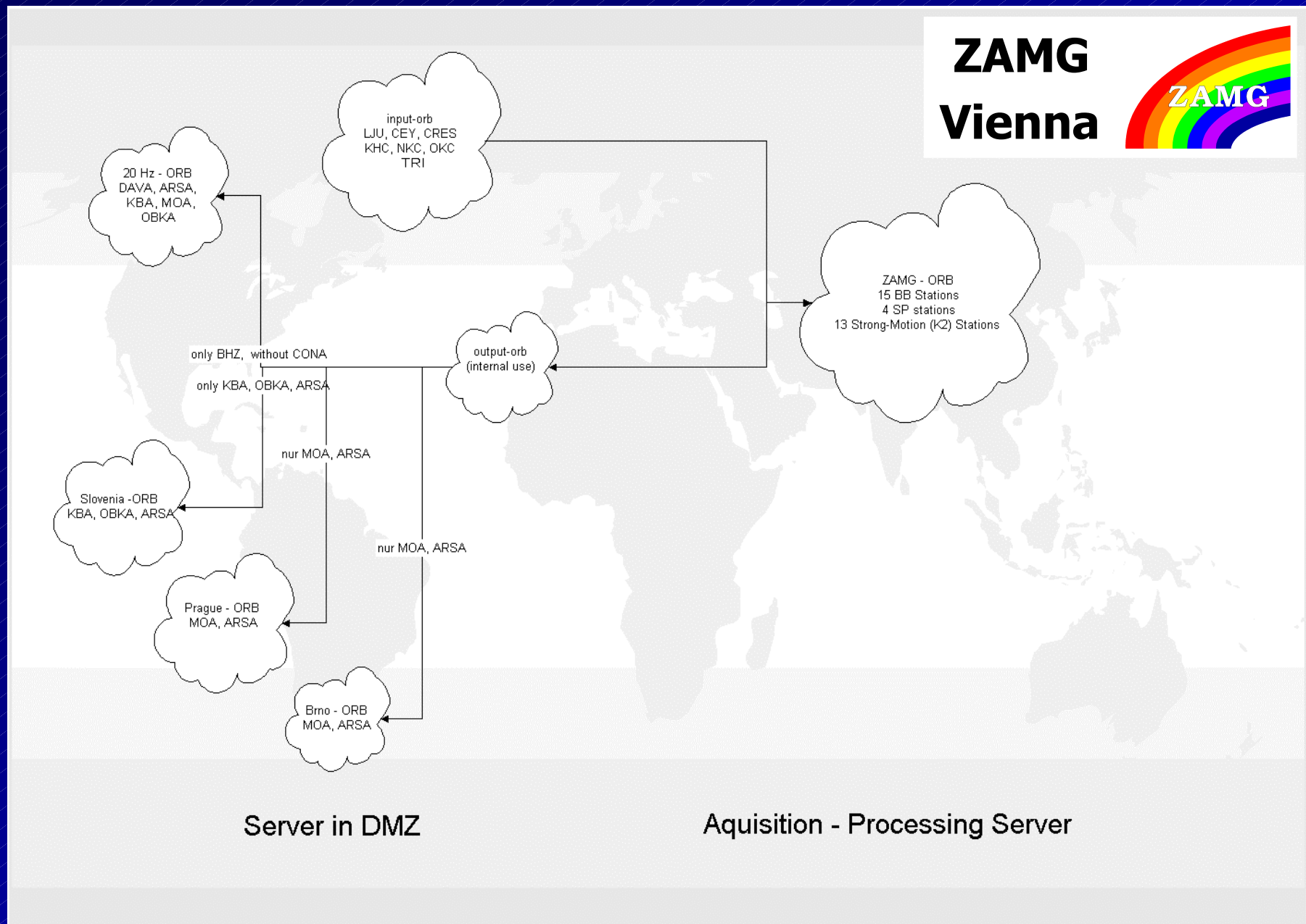


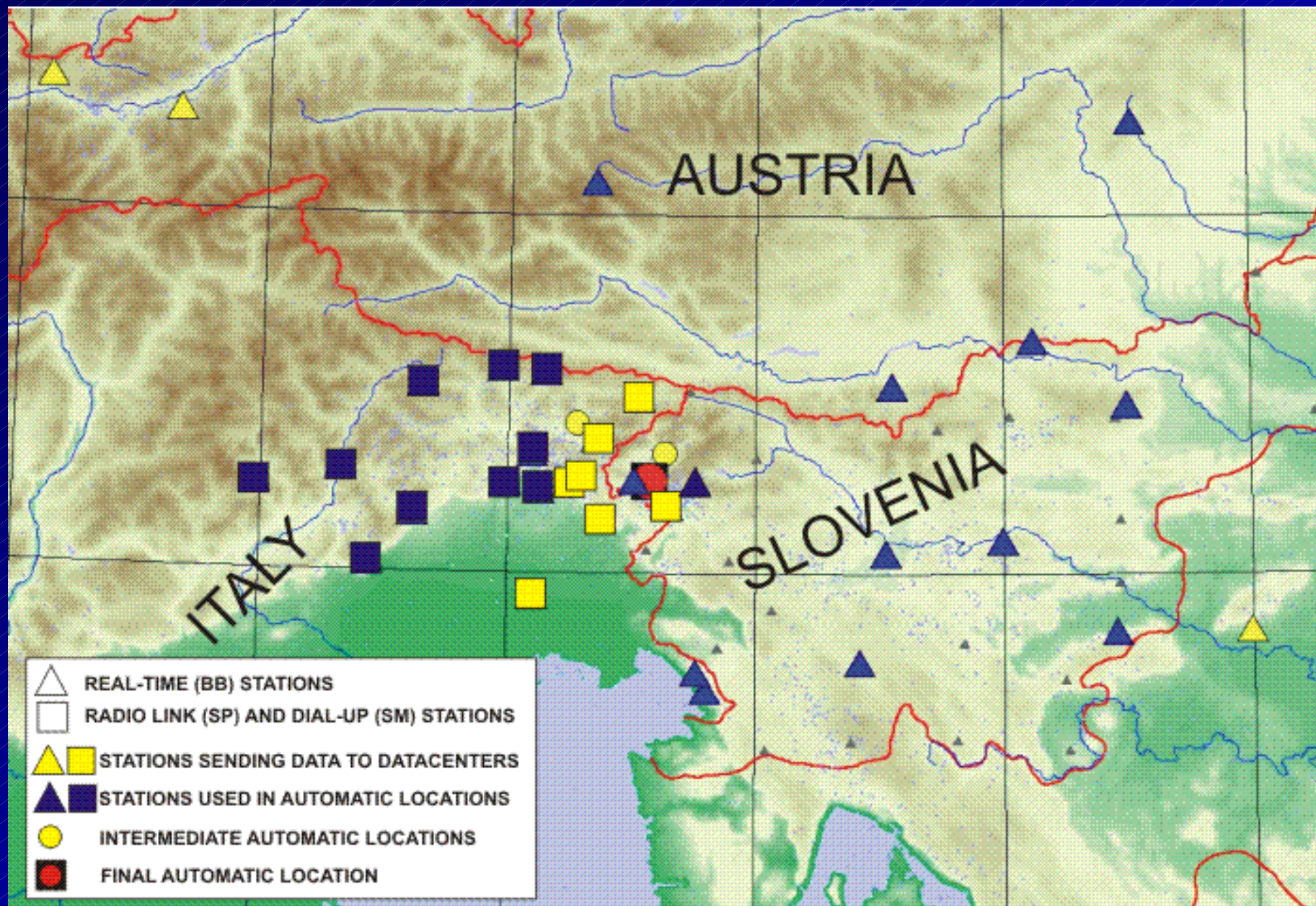
firewall



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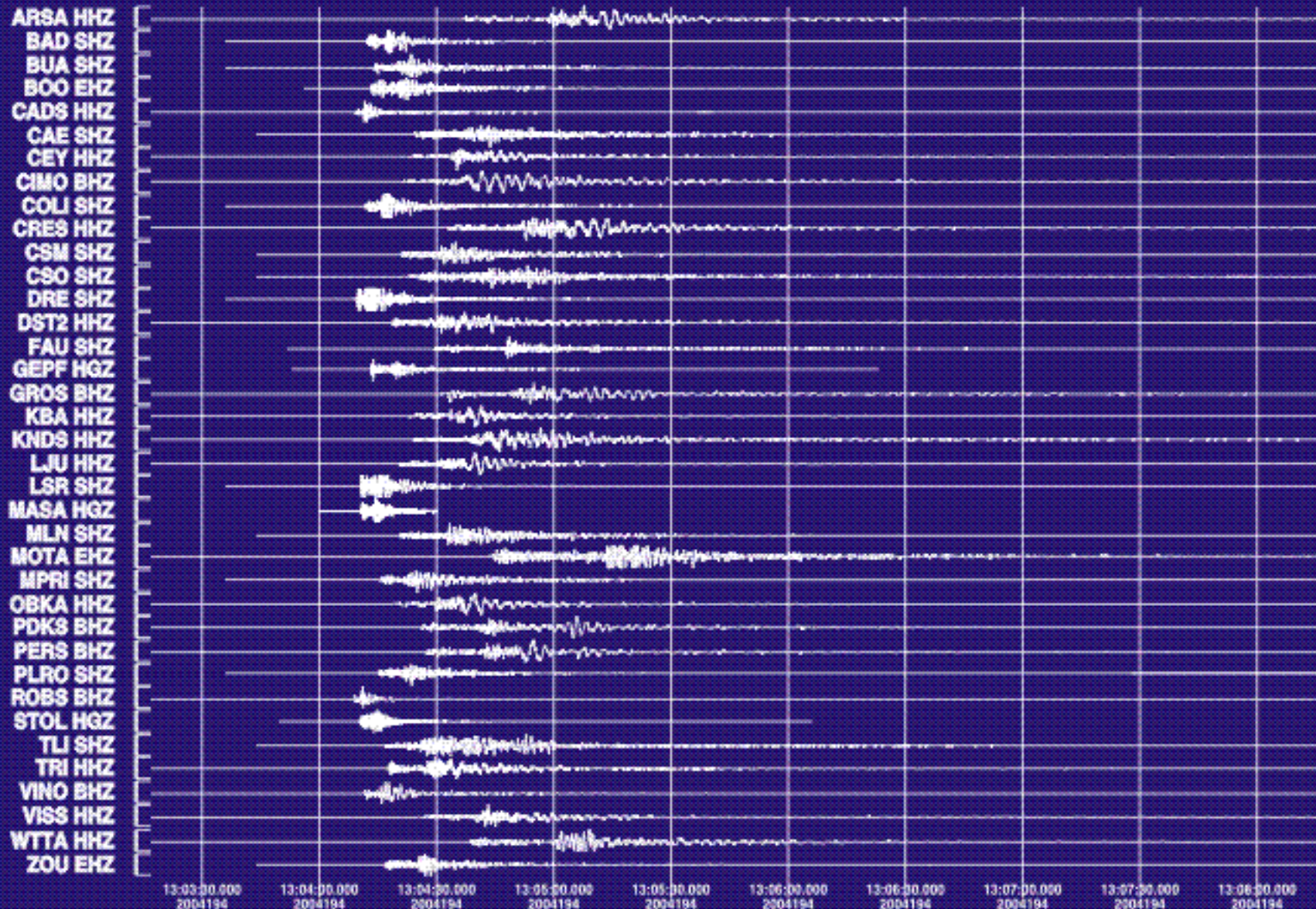






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