EUROPEAN PUBLIC HEALTH INFORMATION NETWORK FOR EASTERN EUROPE (EUPHIN-EAST)

Report on a WHO Meeting

Qawra, Malta
29–31 October 1999
EUROPEAN HEALTH21 TARGET 19
RESEARCH AND KNOWLEDGE FOR HEALTH

By the year 2005, all Member States should have health research, information and communication systems that better support the acquisition, effective utilization, and dissemination of knowledge to support health for all

(Adopted by the WHO Regional Committee for Europe at its forty-eighth session, Copenhagen, September 1998)

ABSTRACT

In 1996, the European Commission and the WHO Regional Office for Europe began a two-year project to develop a European public health information network for eastern Europe (EUPHIN-EAST). This concerted action by 23 countries – 11 countries of central and eastern Europe and 12 newly independent states of the former USSR – is investigating the feasibility and applicability of a telecommunications network, which would link national health databases and make the data easily accessible to national and international users. The main objectives of the fifth EUPHIN-EAST meeting were: to evaluate the functioning of the EUPHIN-EAST network using the experience of nine pilot countries and to agree further actions; to evaluate progress in countries with regard to developing national health indicator databases (based on DPS software), their use and related training; to review the situation on reporting of data to WHO and the introduction of the new HEALTH21 list of HFA indicators, and to discuss and plan further joint activities for participants in the project.

Keywords

PUBLIC HEALTH
INFORMATION SYSTEMS
HEALTH STATUS INDICATORS
SOFTWARE
PROGRAM EVALUATION
EUROPE, EASTERN
COMMONWEALTH OF INDEPENDENT STATES
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**Opening**

**Welcome**

Mr Arun Nanda opened the meeting, welcoming the members of the EUPHIN-EAST network as well as Mr Bernard Le Goff from the European Commission (EC) and Mr Erik Francq and Ms Claudia Heim from Cap Gemini. He welcomed Dr Hugo Agius-Muscat and his colleagues from the Maltese Ministry of Health and thanked them for the tremendous amount of work they had done in helping with the local organization. He also introduced Ms Mary Smalls who would be Rapporteur for the meeting. Unfortunately representatives from Bosnia and Herzegovina, Bulgaria and Turkmenistan could not attend. The list of participants is attached as Annex 3.

Dr Agius-Muscat welcomed everyone to Malta. He described the health care system on the island, which can be traced back over 400 years to the Knights of Malta. He emphasized the importance of such meetings and of participation in international collaborative work for Malta, especially as they proceed towards accession to the European Union (EU) in the years ahead.

**Adoption of agenda and programme**

The provisional programme was adopted. Mr Nanda added that it was flexible and could be changed over the course of the meeting to meet the needs of participants and the availability of speakers.

**Progress report from management team**

Mr Nanda briefly gave the background to the EUPHIN-EAST project for new members. He emphasized the importance of using health information for action. Comparisons highlight areas for action and aid decision-making in every country. The project had succeeded in using telematics to interlink integrated national health databases, which facilitated feedback of comparative information on, for example, core (HFA) indicators, thereby enabling the sharing of best practice.

The relevance of the project to central and eastern European (CEE) Member States was highlighted in the light of systems that had historically been centralized and were now moving towards decentralization under current reforms. The project is intended to support the reform process by devising an information system that can be used to strengthen accountability, performance, efficiency and cost-effectiveness. He set the project in the context of European developments such as ENS CARE (1992–1994); COPERNICUS CARE SUPPORT (1992–1996); G7 GLOPHIN (1995–1996); and EU IDA-HIEMS (1996–1998).

The final report on the project would be submitted to the EC shortly and all participants would receive a copy. This would include a copy of the final cost statements that had already been submitted to the EC. Mr Nanda concluded by showing that *everything* (both the maximum and the minimum) deliverables, as set out in the technical annexes, had been fully achieved. The web site would be further developed to link to local country information and their web sites as well.

Dr Remis Prokhorskas summarized the progress on HFA data reporting and national service indicator (HSI) databases. He asked counterparts in countries to use more effort in cleaning and improving the quality of the data. He estimated that preparing HFA data for WHO/EURO requires...
perhaps several days of work but it is also well worth spending a few extra hours to check the data before they are sent to WHO/EURO. It would also be appreciated if data were sent to WHO/EURO on time.

Mr Bent Loewe Nielsen briefly presented the results of the user evaluation of the web site which had been carried out in April 1999. Several participants had submitted useful comments and the web site has been redesigned in accordance with these. As a new feature on the web site, Mr Loewe Nielsen suggested that a download page be established from where the national/HSI databases of all the participating countries could be downloaded. He therefore asked the participants to submit a copy of their current HSI database and information about the next update to him on their return for this purpose.

Mr Loewe Nielsen briefly presented the results from the test of the pilot network in June 1999. The pilot network is now operational and use of the internet is reliable and has been tested remotely. Some problems with firewalls had been encountered but these have now been solved thanks to support from Slovenia. One of the lessons learned is that all country servers will need to have synchronized settings. Standard replication of the databases is fast (1–5 minutes) and although a full load can take several hours, this does not occur on a regular basis. As a result of experience with the pilot network, Mr Loewe Nielsen recommended establishing a problem database, where different problems and their solutions could be collected and shared among the participants. Furthermore, Mr Loewe Nielsen was happy to announce that seven participants (Azerbaijjan, the Czech Republic, Poland, Slovakia, Slovenia, the Russian Federation and Kazakhstan) were participating “live” in the pilot network. Hungary and Ukraine would hopefully soon overcome the administrative problems which until now had made it impossible for them to join. Armenia, Bulgaria and Romania would hopefully be able to join shortly in the new century.

Finally, Mr Loewe Nielsen gave a demonstration of the EUPHIN-EAST network. He presented the updated web site over a low speed line and demonstrated that all the seven country servers in the pilot network were “live”.

Dr Zuzanna Kamberska from the Czech Republic presented a photo album as a memento of the EUPHIN-EAST project, which was circulated to all participating countries. It was decided to reproduce this album for all participants and associates in the EUPHIN-EAST project.

**Reports on experience from the nine pilot countries**

Progress reports on the implementation of the full complex solution were given by the nine pilot countries (Azerbaijan, the Czech Republic, Hungary, Kazakhstan, Poland, the Russian Federation, Slovakia, Slovenia and Ukraine). Hungary and Ukraine were still experiencing administrative problems in procuring the server but hoped that these would be resolved shortly. Initially, it required three months’ work to install and connect a country server. However, with experience and the sharing of this experience, especially on the telecommunications front, the task has become easier. In some cases, Internet service providers have sometimes been a problem and Kazakhstan had implemented satellite communication links. Countries running different Microsoft Windows products (Win95/98/NT) highlighted the need for increased support in some countries as many people had had to learn new skills in order to use the new products. The Czech Republic suggested that meta-data and navigation hierarchy should be added to the system and also that clearer guidelines needed to be given on the responsibilities for local support costs. They indicated that issues related to upgrades were likely to come up in the near future. The Russian Federation felt
that the project would be better promoted within the newly independent states (NIS) if the web site were translated into Russian. Mr Nanda welcomed the proposal and said he would discuss this possibility further with the relevant countries (e.g. the Russian Federation). Ukraine recommended that wherever possible the project should use national administrative bodies to host servers rather than scientific institutes. They had experienced problems due to major internal changes.

Valuable experience on access through firewalls was gained in Slovenia by connecting the EUPHIN server in the DMZ area (the area outside the firewall but still secure) of the government Intranet. The pilot countries were grateful for the support they had received from Mr Loewe Nielsen. Slovakia coined a new term for the support – “EUPHIN chat”. Mr Nanda acknowledged this support and thanked Mr Loewe Nielsen for his work on the project. Mr Loewe Nielsen would be returning to his studies in the near future and Mr Nanda hoped that the technical support role could be provided from one of the pilot countries, such as the Czech Republic.

**Reports from the EC on related developments in the EU and demonstration of the EU IDA/HIEMS**

Mr Le Goff described the current structure of DG SANCO which covers Health and Consumer Protection and the legislative structures in place to implement the projects. He explained how the EC EUPHIN-HIEMS project had developed within IDA, an EC programme dating from the mid-1990s, to establish a trans-European network for the interchange of data between the administrative bodies of the member states, the EC and international organizations, such as WHO/ EURO and OECD.

The EC EUPHIN-HIEMS project is a phased development covering four topic areas: health monitoring systems (EUPHIN-HIEMS), health surveillance (EUPHIN-HSSCD), blood (EUPHIN-BLOOD), and injury (EUPHIN-INJURY). Different approaches have been adopted for access to the systems for each topic area. For example, EUPHIN-HIEMS is building a virtual private network (VPN) for secure access to the data by member states, whereas EUPHIN-HSSCD has used internet technology. He was very impressed with the results he had seen demonstrated for EUPHIN-EAST and with the speed with which they had been achieved. He thought that the EC may be able to learn from this project. He also stressed how important it was to make sure that the data were used within the member states. He indicated that these EU programmes are open to Eastern European countries which were candidate countries for accession to the EU but individual country agreements were needed. He would be happy to discuss this further with individual countries.

Mr Francq then gave a demonstration of the EUPHIN-HIEMS network link which, due to VPN restrictions, could not be shown live. Mr Francq pointed out that EUPHIN-HIEMS also had a central link but only two member states had distributed database sites (Denmark and Germany). Mr Nanda thanked Cap Gemini (Mr Francq and Ms Heim) not only for coming to the meeting and demonstrating EUPHIN-HIEMS but also for their past input (through Ms Isabelle de Zegher) and contribution as a sponsoring partner to EUPHIN-EAST.
Progress reports from countries on national health service indicators (based on DPS)

Participants reported on progress in development/updating/maintenance/use of the HSI databases (based on DPS) since the meeting in Rome in October 1998. A summary table outlining the main points of the country reports is in Annex 1.

National HSI packages based on the HFA data presentation system were available in all participating countries, although the extent of their use and distribution varied. Dr Prokhorskas asked that all countries send Mr Loewe Nielsen the latest version of their DPS on their return home. He would appreciate it if countries would let him have examples of local materials used for training. These would then be shared with other countries as appropriate. He accepted the comment that WHO/EURO could improve communications about changes to the DPS software and said that they would consider making more use of the web site. Several countries had highlighted the need for improved links and communications across other WHO programmes such as CINDI as well as with the World Bank and UNICEF. Mr Nanda welcomed some of the examples of this happening and would raise it within WHO/EURO. For internal discussions on extending the scope of the database to regional and local levels within countries, he stressed the importance of using specific examples of a particular problem which clearly show the usefulness of DPS in demonstrations. This can be successful in attracting funding from other bodies.

Plans for further development of the EUPHIN-EAST Network

Mr Nanda summarized the key success of the project, which had been of benefit both to WHO and to participating Member States. The project had succeeded in championing the development of a national integrated health database (NIHD), supported by data extracted from other databases, which had been facilitated by having formal agreements on data exchange. These national integrated health databases served two purposes. Firstly, they provided a single coordinated source for health information within the country for wide use, for example through the DPS. Secondly, the NIHD provided the basis for the national distributed database for EUPHIN-EAST.

The main aim for future plans and further developments in Phase 1 would be to ensure that everyone reaches the same level. As the DPS is a key component of this phase, special efforts would be made in this regard. Furthermore, the suggestion already made on how to improve on what is already there, to extend the network and the web site would be implemented. WHO/EURO would continue to coordinate and manage the project.

The plans for a second phase of the project would need to involve greater shared responsibility in participating countries, which would also help to keep further expenditure on the project to a minimum. It would be essential to exploit opportunities, such as sharing servers and internet connections which might be sponsored by other projects. Discussions were continuing regarding the transfer of maintenance and network management of the EUPHIN-EAST network from WHO/EURO to the Czech Republic. Maintenance of country servers would become the responsibility of participating countries as part of their routine tasks. The graphical presentation system in EUPHIN-EAST would need to be updated to next generation software and made modular and replicable at national level, similar to the DPS. One possibility for this could be that this development is contracted out, for example to the WHO collaborating centre for health statistics and information in Lithuania. WHO/EURO would retain responsibility for maintenance of the Copenhagen EUPHIN-EAST hub server and web site. Further development of the web site would
be required with remote links and the EUPHIN-EAST management team would explore the aforementioned possibility that the Russian Federation develop a Russian version of the web site and query tools.

The success of the project was due in part to the good relationships established between participants.

There should therefore be continued efforts to maintain contact between participants and coordination with EUPHIN-HIEMS. Although opportunities to raise additional funding for specific projects between individual countries for development, meetings and country servers could well arise, it would be unlikely that these funds would be allocated from a central fund (pro-rata to each country) as in the past. Hopefully some of the Phase 2 work would be facilitated through WHO/EURO medium-term planning funds to individual countries.

At the data level, Phase 2 will require changes to current practices, more automation and FTP transfers. As countries progress from Phase 1 to 2 they will start to load direct to SQL databases. The validation completed by Dr Prokhorskas at WHO/EURO would be replicated on local country servers, then matched with WHO/EURO accredited data. Once a country is accredited, indicator calculations can be made locally. The end goal is a true, widely distributed system uploaded to the EUPHIN-EAST hub server and replicated to countries.

Participants discussed the plans. In general there was support for a step by step approach with a shift of responsibility for quality to countries but they needed more details on the accreditation process. There was also some concern about the lack of skills in countries at all levels. A project document that could be used to raise funds and at the same time identify structure, roles and responsibilities for all members would be useful. Malta expressed an interest in participating and sharing public health expertise among the countries.

Progress, prospects and proposals for developing intercountry regional HSI databases

Intercountry regional HSI databases

Dr Prokhorskas opened the session, describing the importance of moving comparisons from the country level to the sub-national level. Within countries, internal comparisons can be of value at the regional level but this is also important at international level as, for example, in the WHO atlas of avoidable mortality. In using regional level data it is important that indicators are related to geographical factors and that the regions are of comparable size. It is only by analysing the data at this level that administrative bodies can understand where they are now and where they need to improve.

Central Asian republics (CAR)

Dr Marat Bozgunchiev presented progress on the CARINFONET project, including the regional HSI database covering all five central Asian countries at oblast level. The database includes all HFA data items and covers 55 million people. It is regularly updated and widely used. A monthly newsletter is prepared and some of the recent topics covered include: the increase in CHD deaths since 1980; smoking; hypertension; overweight; quality assurance of death coding as related to infant deaths; and implementation of international definitions in CAR by 2001.
Baltic states

Dr Aldona Gaizauskiene presented some small areas analyses for the Baltic states. There was considerable variation over the indicators at this level and she needed to discuss the robustness of indicators with collaborating states.

Selected central European countries

Dr Kamberska tabled a paper describing progress on the Frontier DPS for the Czech Republic, Hungary and Slovakia. The previous plan to include Poland had been abandoned due to administrative reorganization of districts. Data for 1996–1998 have been collated for 35 indicators for NUTS level 3 (100 000–1 000 000 inhabitants). The big issue is to secure funding for this work as it is of value for the Copernicus countries to compare district level data with present EU countries, preferably in time series to permit observation of changes and trends in health status. To speed up progress, increased political support is required and it may be worth including some environmental data to raise appreciation of DPS at higher-level meetings.

Progress, prospects in developing hospital based HSI/DPS systems

Experience in hospital based HSI/DPS

Mr Nanda introduced the session saying that the roots of the project go back to health care and HSI in the 1980s. Hospitals still consume most of the health care resources and in western Europe a new industry has developed for benchmarking hospitals. The DPS provides a tool for benchmarking. It provides a first screening to raise problems which then need to be followed by more detailed analysis.

Dr Gaizauskiene, WHO collaborating centre for health statistics and information, Lithuania, presented over four years’ data for 200 institutions using a hospital level version of HSI/DPS.

Discussions highlighted the importance of case-mix data (in comparisons between hospitals) and the understanding of the different health-financing systems when making country or intercountry comparisons. In Romania the insurers pay on the basis of length of stay, which does not encourage doctors to discharge patients quickly from hospital. Also the system would need to be able to include private insurance hospitals as well as state hospitals. Ukraine described work they had completed to prepare a composite indicator based on weightings of regions. Evaluating the performance of hospitals had caused a serious political backlash. Azerbaijan supported this view explaining that the same indicators can be interpreted differently. It was also pointed out that there is a need to develop clear principles for choosing comparable indicators and standardizing them whenever possible.

Ms Smalls presented a proposal to establish a Healthcare database for EUPHIN-EAST countries. She stressed the importance of understanding the variations in data definitions and standards and of being able to develop mapping tables for the aggregation of patient level data to the lowest common level for robust international comparisons. In discussion, Mr Nanda stressed the need for patient level data for this type of analysis, especially if case-mix were to be controlled for. For international comparisons, the roots of the coding structure for diagnosis will be ICD-based. Dr Kamberska felt that most of the issues raised in the paper had already been addressed and that the key difference between EUPHIN-EAST and EC countries was that the latter already shared a common basis for comparison, with all individual hospital discharge records coded to 3–4 digits ICD level. Mr Nanda suggested that Ms Smalls rethink the project and establish a small fast track group of countries which would be willing to participate and benefit from this level of comparison.
The following countries volunteered to participate in any such future project: Azerbaijan, Belarus, Croatia, Czech Republic, Georgia, Hungary, Lithuania, Poland, Romania, the Russian Federation, Slovakia and Ukraine.

**Situation and plans for the preparation of highlights on health**

Mr Nanda described the work of WHO/EURO in preparing highlights on health, which were first completed for the NIS around 1992. Subsequently, highlights for EU countries were produced as part of a contract with the EC. The highlights for the NIS were now out of date and therefore WHO/EURO had started to update them and prepare new ones for CCEE. The highlights are based on the HFA database and give an overview of the health situation in the country, highlighting issues which are only noticeable when making comparisons with other countries. For example, in Israel male life expectancy is good when compared to a peer group of countries but for females it is bad. Experts in the country could not explain this immediately and this issue is now being investigated.

In the United Kingdom, teenage pregnancy rates are flat compared to the rest of the EU where they have been steadily falling. In Romania, male life expectancy is now at the level of the mid-1960s.

Reports for the ten EU accession countries will hopefully be funded by the EC. The process is for WHO/EURO to prepare the draft highlights based mainly on the HFA database. The countries are then asked to review them and supplement them with additional information.

The highlights on health serve to cover a gap between statistical year books and public health reports. They are easy to read, easy to copy and user-friendly. They are made available on a web site. For the 12 NIS, WHO/EURO will prepare the highlights in Russian, using local expertise in the countries. First drafts are nearly complete for Kazakhstan, Kyrgyzstan, the Russian Federation, Tajikistan, Turkmenistan and Uzbekistan. Work will start next January on Armenia, Azerbaijan, Belarus, Georgia, the Republic of Moldova and Ukraine.

Public health reports serve a different and more policy-oriented purpose, whereas highlights are basically descriptive. WHO/EURO encourages countries to prepare their own public health reports, which tend to be comprehensive reports internal to the individual country, pointing to areas for public health action. The responsibility of preparing public health reports must lie with each individual country so that they maintain ownership of the issues highlighted. The public health reports stem from a longstanding tradition in Europe from the middle of the nineteenth century and range from purely descriptive to analytical. They should cover both good and bad points. Several countries are now starting to include international comparisons in their public health reports. In some countries the periodicity is every few years only whereas in others there are broad reports every 5 years or so with a specialized topic report in the intervening years. WHO/EURO produced guidelines in 1991–1992 for country reports and is now establishing a library of examples, a directory of counterparts and a database of such reports. WHO/EURO would be happy to receive examples from Member States. The target audience for public health reports is parliament, policy-makers, managers (general and technical) and the general public. They should be available in different formats: the full report, an executive summary and a flyer.

WHO/EURO is happy that the directory of counterparts will help contact between key people. For this purpose an access database has been developed and WHO/EURO will be requesting information from Member States to update the database. To speed up this process, it was suggested that details of the key contact in each country be given to Mr Nanda before the meeting finished.
HFA indicators for the new HEALTH21 policy

Dr Prokhorskas referred to working papers 7, 8 and 9 in updating the participants on developments for the new HEALTH21 policy indicators. There are now 59 indicators at generic level and WHO/EURO has tried to maintain continuity. The sources for indicators are mainly existing WHO/EURO programmes. These are mainly indicators related to mortality and infectious diseases, which cover 45% of all indicators. About 40% of the indicators come from other sources and the remaining 15% are new indicators. In general, changes to the present list of operational indicators are relatively small. Some of the important indicators (e.g. on smoking and alcohol consumption) are collected by health interview surveys.

In discussion it was mentioned that in some countries it is possible to obtain lifestyle data from administrative sources. Lithuania highlighted the possible bias in recording these data. For instance, when data on smoking is collected in general practitioners’ surgeries it only includes people visiting clinics, thereby excluding the portion of the population unable to afford health care. They felt that both administrative and survey data would be required. Poland had obtained interesting results from a population survey in 1996 which had highlighted the need for some quite complicated analyses, including standard errors of the estimates. Croatia supported the inclusion of health and household surveys. The Republic of Moldova would like to use a common tool for gathering smoking and alcohol data, which is missing at the moment, although it should shortly be available from the new general practitioner set-up where each family doctor has about 2000 patients. Romania’s last health survey in 1997 included lifestyle data. They are currently preparing to run a new survey.

Dr Prokhorskas welcomed the feedback and stressed the importance of countries using standard tools. He highlighted the WHO/EURO research programme CINDI (for noncommunicable diseases) which had been running for 15 years and is linked to the WHO/HQ Monica programme. Perhaps more use could be made of such programmes within countries. He requested comments on new HFA indicators (if any) within 2–3 weeks of this meeting.

Assessment of possibilities and obstacles for collection of mortality data at individual record level

Dr Prokhorskas opened the discussion with a summary of the background to the reporting of mortality data to WHO/EURO. He mentioned that there is a need to assess the feasibility of collecting mortality data at individual record level. This would increase the flexibility of the analysis, particularly regarding issues of inequity. The suggestion was that countries could send anonymous individual level data to WHO/EURO containing age (or date of birth and date of death), place of residence, cause of death and possibly some other data items. The issue of confidentiality may be the main obstacle for the data reporting at individual record level.

Participants raised concerns on the need for legislation in several Member States. For NIS it was suggested that GOSKOMSTAT should be contacted about the feasibility of reporting at individual record level. Others were concerned as to how the data would be used beyond WHO/EURO and that small numbers in cells could make non-identifiable data identifiable. The general advice to WHO was to approach the issue carefully. The proposal would first need to be discussed informally with the national statistical offices. WHO/EURO agreed to draft a consultative paper and e-mail to it participants for feedback before starting a formal consultation on the matter.
Future prospects for the EUPHIN-EAST network

Mr Nanda outlined the WHO medium-term planning (MTP) strategy which develops individual country and intercountry programmes in two-year cycles. Negotiations take place between WHO/EURO and ministries of health through the WHO country Liaison Officers. A new two-year cycle will begin in year 2000. Six countries in the EUPHIN-EAST network will receive additional allocations (Armenia, Azerbaijan, Bosnia and Herzegovina, Kyrgyzstan, Republic of Moldova, Tajikistan). Thus opportunity exists for funding to strengthen national health information systems, such as HSI/DPS, in line with EUPHIN-EAST. Limited support could be available for participation in the CARINFONET and possibly for a meeting of the network of counterparts on the HFA monitoring and evaluation exercise. WHO/EURO would e-mail all countries in the fortnight following the meeting regarding the MTP programme. Mr Nanda again stressed that participants needed to exploit opportunities of interest from different funding bodies so that joint objectives can be delivered.

Health surveys

Mr Nanda informed the meeting of work being completed under the EUROHIS project to produce standard instruments for health surveys, which followed on from the WHO/EURO 1995 publication. The main participants are from the EU and EFTA but WHO/EURO has funded the participation of the CEE/NIS in the project. The project time frame is from 1998 to 2001, although there is already a six-month delay.

Conclusion and immediate tasks

EUPHIN-EAST

- Project funding coming to an end.
- WHO/EURO will investigate the possibility of outsourcing the maintenance of the EUPHIN-EAST Hub Server to, for example, the Czech Republic. The web server remains the responsibility of WHO/EURO.
- Viewed as a highly successful project: EU very impressed with results. The final report will be distributed by WHO/EURO once it is given to EC.
- Good to know of intentions of more countries to join EUPHIN-EAST network.
- Web site development will continue.
- Plans for Phase II outlined and suggestions for Phase III gathered. Need to finalize plans for Phase II with ongoing service led by Member States through the establishment of collaborating centres. Phase II plan to be made by WHO/EURO.
- Hungary and Ukraine are still experiencing problems with joining “live”. Armenia, Bulgaria and Romania will hopefully join at the beginning of next century.
- WHO/EURO will investigate the possibilities of adding meta-data and navigation hierarchy to the querying system.
- WHO/EURO will investigate the possibilities of including a “chat” service on the web site.
- WHO/EURO will draw up clear guidelines on the responsibilities for local support costs.
- WHO/EURO will, together with the Russian Federation, investigate the possibilities of developing a Russian version of the web site.
**Progress on HSI/DPS**

- Useful reports from all participants. All to send latest version of DPS with information of next update to Mr Loewe Nielsen on return home.
- Dr Prokhorskas would welcome examples of local materials used for training.
- When demonstrating the system, all should try to use a specific example of particular problems that clearly show the usefulness of DPS. This may attract funding from other bodies.
- WHO/EURO could improve communication on changes to HSI/DPS software. WHO/EURO will investigate the use of the web site for this.
- Some progress on work for intercountry regional HSI databases in Baltic states and central Asian republics. The difficulties with the need for comparable populations and increased local interest were highlighted.
- Hospital-based HSI/DPS are progressing slowly in Czech Republic and Lithuania. Interest from 12 countries in taking forward ENS CARE ideas from patient based data coded by ICD. WHO/EURO to follow up.
- Participants should make greater efforts to clean and improve the quality of data.

**General**

- Highlights on health: WHO/EURO will update previous reports and develop new ones. WHO/EURO will contact individual participants as work commences.
- Public health reports are the responsibility of each country. WHO/EURO would like to establish a directory of counterparts. At the meeting Mr Nanda received the name of a proposed lead contact from each country to whom WHO/EURO would mail enquiries.
- Feedback on HFA21 papers 8 and 9 should be made to WHO/EURO by mid-November.
- WHO/EURO will adopt a soft approach on access to individual mortality records. Advice will be sought from participants through a draft e-mail on this topic.
- WHO/EURO will e-mail all participants by mid November regarding MTP.

**Closure of the meeting**

Mr Nanda thanked everyone for attending, as well as colleagues in Malta for hosting a successful meeting. He was particularly appreciative of the interpreters who had done an excellent job in keeping up with fast-flowing discussions in English and Russian. He thanked his new Technical Assistant, Ms Ellie Huybens Hald, for all her hard work in organizing the event.
Annex 1

SUMMARY TABLE OF NATIONAL HEALTH SERVICE INDICATOR PRESENTATION SOFTWARE SYSTEM

A. For 11 former Copernicus countries + Croatia

<table>
<thead>
<tr>
<th>Major points of country reports</th>
<th>Albania</th>
<th>Bulgaria</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is the progress in the further development of the national HSI package(s), particularly since the last meeting in Rome?</td>
<td>• Do you have one package or several different versions, e.g. separate ones by regions, hospitals or other special adaptations of DPS?</td>
<td>Two packages: Regional level - 560 indicators Regional hospitals - 340 indicators</td>
</tr>
<tr>
<td></td>
<td>• What changes were made to the previous package, e.g. indicators added, definitions prepared etc. Please attach the latest printout of indicators.</td>
<td>A book of health care indicator definitions was prepared. It will be used as the basis for indicator definitions inside DPS package. Finished ICD-10 revision, implementation from next year.</td>
</tr>
<tr>
<td></td>
<td>• Which version of DPS do you use: DOS or Windows?</td>
<td>Both Windows and DOS version</td>
</tr>
<tr>
<td></td>
<td>• Which language?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Do you update it manually or use data import?</td>
<td>Data input is semi-automated: the raw data is inserted manually in a spreadsheet and the indicators are calculated automatically. Then indicators are imported into DPS.</td>
</tr>
<tr>
<td></td>
<td>• How often do you update and distribute your HSI package?</td>
<td>Annually</td>
</tr>
<tr>
<td></td>
<td>• How many copies do you usually distribute and to whom?</td>
<td>40 copies Distributed to regional Health Centres and some other Health Institutions</td>
</tr>
<tr>
<td></td>
<td>• Can you make a rough estimate of how many potential users are aware about your package?…</td>
<td></td>
</tr>
<tr>
<td></td>
<td>…and of how many use it - at least occasionally?</td>
<td></td>
</tr>
<tr>
<td>National seminars</td>
<td>During 1998 - how many and which dates?</td>
<td>None in 1998 due to above-mentioned changes. Intend to organize one at end of 1999.</td>
</tr>
<tr>
<td></td>
<td>• Who were participants?…</td>
<td>Regional health authorities</td>
</tr>
<tr>
<td></td>
<td>• …and how many were there?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• New training materials (e.g. new or improved HSI application cases) developed?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• What are your plans for further development, expansion, regular updating, dissemination and advertising of the package?</td>
<td>In the future we plan to stress the use of the package in hospitals and to expand the number of indicators assessing the activities and cost effectiveness of hospitals.</td>
</tr>
<tr>
<td>EUPHIN-EAST pilot network. Please describe any recent changes/progress in your country/centre regarding:</td>
<td>Access to Internet</td>
<td>Still do not have a permanent IP-address. Waiting in the next months to be included in government administration network. However, behind a firewall.</td>
</tr>
<tr>
<td></td>
<td>Hardware and software</td>
<td>No changes</td>
</tr>
<tr>
<td></td>
<td>Availability of skilled staff</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Please describe your experience in testing the EUPHIN-EAST web site.</td>
<td></td>
</tr>
<tr>
<td>Comments</td>
<td>For the future development of DPS we think that the problem for harmonization of hospitals in Europe, and especially in countries from Central and Eastern Europe, will be of common interest.</td>
<td></td>
</tr>
<tr>
<td>Major points of country reports</td>
<td>Croatia</td>
<td>Czech Republic</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>---------</td>
<td>----------------</td>
</tr>
<tr>
<td><strong>What is the progress in the further development of the national HSI package(s), particularly since the last meeting in Rome.</strong></td>
<td>National packages: 53 (1991) to 91 (1998) indicators</td>
<td>Three versions DPS-o: Administration level, 85 Districts (okres) DPS-k: Regions (NUT3), 14 regions (kraj) DPS-ok: 2-level version with districts and regions</td>
</tr>
<tr>
<td>Do you have one package or several different versions, e.g. separate ones by regions, hospitals or other special adaptations of DPS?</td>
<td>Croatia is now divided into 20 counties. There have been several changes since the counties were established, so the latest division was used. County division took place in 1993 and was revised in 1995. Whenever available, data have been loaded since 1991, most of them since 1995.</td>
<td></td>
</tr>
<tr>
<td>What changes were made to the previous package, e.g. indicators added, definitions prepared etc. Please attach the latest printout of indicators.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Which version of DPS do you use: DOS or Windows?</td>
<td>Windows</td>
<td>Windows</td>
</tr>
<tr>
<td>Which language?</td>
<td>Croatian</td>
<td>Completely in Czech</td>
</tr>
<tr>
<td>Do you update it manually or use data import?</td>
<td>Data were loaded manually</td>
<td></td>
</tr>
<tr>
<td>How often do you update and distribute your HSI package?</td>
<td>Annually</td>
<td>DPS-o: twice a year (latest June 1998)</td>
</tr>
<tr>
<td>How many copies do you usually distribute and to whom?</td>
<td>Distributed on the District Administration Network (OKUNET) available to District Health Authorities in all districts</td>
<td></td>
</tr>
<tr>
<td>Can you make a rough estimate of how many potential users are aware about your package?…</td>
<td>Apart from District Health Authorities, estimated 600-700 users</td>
<td></td>
</tr>
<tr>
<td>…and of how many use it - at least occasionally?</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>National seminars:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>During 1998 - how many and which dates?</td>
<td>Seminars (5 one-day training courses) will be organized by the end of this year</td>
<td>One national seminar forthcoming: 03-11–1999</td>
</tr>
<tr>
<td>Who were participants?…</td>
<td></td>
<td></td>
</tr>
<tr>
<td>…and how many were there?</td>
<td></td>
<td>200 people invited</td>
</tr>
<tr>
<td>New training materials (e.g. new or improved HSI application cases) developed?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>What are your plans for further development, expansion, regular updating, dissemination and advertising of the package?</td>
<td>Preparing similar programs for data on hospitalization and for the cancer registry</td>
<td></td>
</tr>
<tr>
<td><strong>EUPHIN-EAST pilot network Please describe any recent changes/progress in your country/centre regarding:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Access to Internet</td>
<td></td>
<td>Incompatible network card. When installed server works without problems</td>
</tr>
<tr>
<td>Hardware and software</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Availability of skilled staff</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Please describe your experience in testing the EUPHIN-EAST web site.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Comments</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Major points of country reports**

<table>
<thead>
<tr>
<th>What is the progress in the further development of the national HSI package(s), particularly since the last meeting in Rome.</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Do you have one package or several different versions, e.g. separate ones by regions, hospitals or other special adaptations of DPS?</td>
</tr>
<tr>
<td>One version: 156 Indicators (1994-97) at regional level (10 regions)</td>
</tr>
<tr>
<td>One version</td>
</tr>
<tr>
<td>• What changes were made to the previous package, e.g. indicators added, definitions prepared etc. Please attach the latest printout of indicators.</td>
</tr>
<tr>
<td>Separate packages have been introduced: Quality of Health Care; Hospital Morbidity; Primary Health Care Morbidity; Registry of Cancers and Diabetes.</td>
</tr>
<tr>
<td>Regional breakdown is currently being tested</td>
</tr>
<tr>
<td>• Which version of DPS do you use: DOS or Windows?</td>
</tr>
<tr>
<td>Windows</td>
</tr>
<tr>
<td>Windows</td>
</tr>
<tr>
<td>• Which language?</td>
</tr>
<tr>
<td>English; Macedonian version planned</td>
</tr>
<tr>
<td>• Do you update it manually or use data import?</td>
</tr>
<tr>
<td>Manually; automated version planned</td>
</tr>
<tr>
<td>Imported from MS Excel</td>
</tr>
<tr>
<td>• How often do you update and distribute your HSI package?</td>
</tr>
<tr>
<td>Update with 1998 data to come soon</td>
</tr>
<tr>
<td>Yearly. Latest 1999 with 1997 data</td>
</tr>
<tr>
<td>• How many copies do you usually distribute and to whom?</td>
</tr>
<tr>
<td>Distributed via diskettes and via web site</td>
</tr>
<tr>
<td>• Can you make a rough estimate of how many potential users are aware about your package?…</td>
</tr>
<tr>
<td>• …and of how many use it - at least occasionally?</td>
</tr>
<tr>
<td>• During 1998 - how many and which dates?</td>
</tr>
<tr>
<td>Training seminars will be realized through meetings of the Associations of Specialists of Social Medicine and through real training seminars in the four regions</td>
</tr>
<tr>
<td>• Who were participants?…</td>
</tr>
<tr>
<td>Ministry of Health, Public Health Institutions, Health Insurance Fund, Central Statistical Department and Health Care Institutions</td>
</tr>
<tr>
<td>County offices of National Sick Fund and National Public Health Service</td>
</tr>
<tr>
<td>• …and how many were there?</td>
</tr>
<tr>
<td>40 persons</td>
</tr>
<tr>
<td>• New training materials (e.g. new or improved HSI application cases) developed?</td>
</tr>
<tr>
<td>Systematic review to correct errors and further investigation of validity of available indicators. During the year 2000 indicator definitions will be prepared and included in the updated version. Inclusion of new indicators. Representation at both county and regional level.</td>
</tr>
<tr>
<td>• What are your plans for further development, expansion, regular updating, dissemination and advertising of the package?</td>
</tr>
<tr>
<td>• EUPHIN-EAST pilot network Please describe any recent changes/progress in your country/centre regarding:</td>
</tr>
<tr>
<td>• Access to Internet</td>
</tr>
<tr>
<td>Lack of appropriate telecommunication technology. (There is an ongoing project proposal for reconstruction of the Public Health facilities)</td>
</tr>
<tr>
<td>• Hardware and software</td>
</tr>
<tr>
<td>Lack of computer knowledge, especially in the local Public Health statistic units and lack of appropriate professional staff with computer-informatics manager background, in all units. At the moment local computer firms are providing hardware and software services.</td>
</tr>
<tr>
<td>• Availability of skilled staff</td>
</tr>
<tr>
<td>• Please describe your experience in testing the EUPHIN-EAST web site.</td>
</tr>
<tr>
<td>Problems in providing adequate data for hospital facilities (surgery procedures), health care utilization and costs, data for disabilities and lifestyle data. (Will be provided through Health Interview Surveys in the EUROHIS Program)</td>
</tr>
<tr>
<td>Comments</td>
</tr>
</tbody>
</table>

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**The former Yugoslav republic of Macedonia**

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**Hungary**

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### Major points of country reports

#### Latvia

- **What is the progress in the further development of the national HSI package(s), particularly since the last meeting in Rome.**
  - Do you have one package or several different versions, e.g. separate ones by regions, hospitals or other special adaptations of DPS?
    - One version: 800 Indicators
  - What changes were made to the previous package, e.g. indicators added, definitions prepared etc. Please attach the latest printout of indicators.
    - We prepared health statistics definitions of indicators.
  - Which version of DPS do you use: DOS or Windows?
    - Windows
  - Which language?
    - National language
  - Do you update it manually or use data import?
    - Manually and also by using automated import from other databases
  - How often do you update and distribute your HSI package?
    - Annually: Data from 1989–1997
  - How many copies do you usually distribute and to whom?
    - 34: Ministry of Welfare, Districts, State and regional Sickness Funds, State hospitals, Health Centres and other.
  - Can you make a rough estimate of how many potential users are aware about your package?...
    - 140-150
  - ...and of how many use it - at least occasionally?
    - National seminars:
      - During 1998 - how many and which dates?
      - Who were participants?...
        - Health managers and information specialists. Master of Public Health course
      - ...and how many were there?
        - Health managers and information specialists: 20 participants Master of Public Health: 20 participants
        - 15 persons, 2 days
      - New training materials (e.g. new or improved HSI application cases) developed?
        - Completed and distributed to the potential users:
          - new version of user manual for the national DPS system.
          - new workbook “Use of Health Indicator System”.
      - What are your plans for further development, expansion, regular updating, dissemination and advertising of the package?
        - Development of new indicators regarding health finances and economics.
        - Development of new version of DPS with country division by the major regions of Regional Sickness Funds.
        - At present developing DPS at hospital level.

#### Lithuania

- One version: Separated by regions
- We prepared health statistics definitions of indicators.
- DOS and Windows
- Yearly: Last update 1999 with 1998 data
- Currently the local network has been installed at Ministry of Health and we plan to put DPS on the server. Thus everybody will have the access to the database. The main users of DPS are chief physicians of municipalities and districts. DPS is a regular part of postgraduate courses and it is used in teaching.

### National seminars:

- During 1998 - how many and which dates?
  - Who were participants?...
    - Health managers and information specialists. Master of Public Health course
  - ...and how many were there?
    - Health managers and information specialists: 20 participants Master of Public Health: 20 participants
    - 15 persons, 2 days
  - New training materials (e.g. new or improved HSI application cases) developed?
    - Completed and distributed to the potential users:
      - new version of user manual for the national DPS system.
    - What are your plans for further development, expansion, regular updating, dissemination and advertising of the package?
      - Development of new indicators regarding health finances and economics.
      - At present developing DPS at hospital level.

### EUPHIN-EAST pilot network

**Please describe any recent changes/progress in your country/centre regarding:**

- Access to Internet
  - Information component is included in PHARE project for 1999-2000. According to this project, the Lithuanian Health Information Centre will be supplied with new computers. (Hopefully it will then also be included in the EUPHIN-EAST network).

#### Comments
### Major points of country reports

#### Poland

<table>
<thead>
<tr>
<th>What is the progress in the further development of the national HSI package(s), particularly since the last meeting in Rome.</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Do you have one package or several different versions, e.g. separate ones by regions, hospitals or other special adaptations of DPS?</td>
</tr>
<tr>
<td>• What changes were made to the previous package, e.g. indicators added, definitions prepared etc. Please attach the latest printout of indicators.</td>
</tr>
<tr>
<td>• Which version of DPS do you use: DOS or Windows?</td>
</tr>
<tr>
<td>• Which language?</td>
</tr>
<tr>
<td>• Do you update it manually or use data import?</td>
</tr>
<tr>
<td>• How often do you update and distribute your HSI package?</td>
</tr>
<tr>
<td>• How many copies do you usually distribute and to whom?</td>
</tr>
<tr>
<td>• Can you make a rough estimate of how many potential users are aware about your package?…</td>
</tr>
<tr>
<td>•…and of how many use it - at least occasionally?</td>
</tr>
</tbody>
</table>

**National seminars:**

| During 1998 - how many and which dates? | One National training seminar in May 1998 Special presentation March 1999 |
| Who were participants?… | Special presentation: Polish Society for Environmental Epidemiology |
| …and how many were there? | |
| New training materials (e.g. new or improved HSI application cases) developed? | |
| What are your plans for further development, expansion, regular updating, dissemination and advertising of the package? | To a large extent depends on availability of information according to the new administrative division of the country. May need to introduce a two-level system in accordance with the new regional divisions but it will require huge effort |

**EUPHIN-EAST pilot network**

**Please describe any recent changes/progress in your country/centre regarding:**

| Access to Internet | A permanent internet connection was established in October 1999. |
| Hardware and software | New network installed in October 1999. One NT server (alpha based) is dedicated to DSP/HSI. The system is located behind a firewall. |
| Availability of skilled staff | System administrator employed on part-time basis from a private company. Database manager on permanent position |
| Please describe your experience in testing the EUPHIN-EAST web site. | Indices are not grouped according to subject. Definitions would be helpful. |

**Comments**

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#### Romania

<table>
<thead>
<tr>
<th>What is the progress in the further development of the national HSI package(s), particularly since the last meeting in Rome.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two versions: Three level version (national, district and communes): 120 Indicators Two level version (national and districts): approx. 600 indicators</td>
</tr>
<tr>
<td>• Do you have one package or several different versions, e.g. separate ones by regions, hospitals or other special adaptations of DPS?</td>
</tr>
<tr>
<td>• What changes were made to the previous package, e.g. indicators added, definitions prepared etc. Please attach the latest printout of indicators.</td>
</tr>
<tr>
<td>• Which version of DPS do you use: DOS or Windows?</td>
</tr>
<tr>
<td>• Which language?</td>
</tr>
<tr>
<td>• Do you update it manually or use data import?</td>
</tr>
<tr>
<td>• How often do you update and distribute your HSI package?</td>
</tr>
<tr>
<td>• How many copies do you usually distribute and to whom?</td>
</tr>
<tr>
<td>• Can you make a rough estimate of how many potential users are aware about your package?…</td>
</tr>
<tr>
<td>•…and of how many use it - at least occasionally?</td>
</tr>
</tbody>
</table>

**National seminars:**

| During 1998 - how many and which dates? | Four training centres have been organized and equipped, but due to delays in HMIS project courses have also been delayed. |
| Who were participants?… | Special presentation: Polish Society for Environmental Epidemiology |
| …and how many were there? | |
| New training materials (e.g. new or improved HSI application cases) developed? | |
| What are your plans for further development, expansion, regular updating, dissemination and advertising of the package? | Automatic feeding into DPS/HSI using Oracle database from HMIS |

**EUPHIN-EAST pilot network**

**Please describe any recent changes/progress in your country/centre regarding:**

| Access to Internet | |
| Hardware and software | |
| Availability of skilled staff | |
| Please describe your experience in testing the EUPHIN-EAST web site. | |

**Comments**

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### Major points of country reports

<table>
<thead>
<tr>
<th>Slovakia</th>
<th>Slovenia</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>What is the progress in the further development of the national HSI package(s), particularly since the last meeting in Rome.</strong></td>
<td><strong>One version: 9 regions, 376 indicators</strong></td>
</tr>
</tbody>
</table>
| • Do you have one package or several different versions, e.g. separate ones by regions, hospitals or other special adaptations of DPS? | Two versions:  
Version with old administrative arrangement  
Version with new administrative arrangement |
| • What changes were made to the previous package, e.g. indicators added, definitions prepared etc. Please attach the latest printout of indicators. | More indicators (180→320)  
Work started on indicator definitions. |
| • Which version of DPS do you use: DOS or Windows? | DOS and Windows  
Windows |
| • Which language? | Slovak  
Slovene |
| • Do you update it manually or use data import? | Using “data import”  
Manually |
| • How often do you update and distribute your HSI package? | Annually  
Next update November 1999 |
| • How many copies do you usually distribute and to whom? | Approx. 200 diskettes to Ministry of Health, directors of hospitals and Public Health Institutes. To state regional doctors and state district doctors.  
Approx 40 copies: Ministry of Health, 9 regional offices of Public Health Institute, Central Statistical Bureau, Central Insurance Company and some hospital centres. |
| • Can you make a rough estimate of how many potential users are aware about your package?... | ...and of how many use it - at least occasionally? |
| **National seminars:** | **Planned one-day seminar with workshop** |
| • During 1998 - how many and which dates? | One national and three regional seminars.  
New seminar will be held 18 November 1999.  
Planned one-day seminar with workshop |
| • Who were participants?... | 10-30 participants |
| • New training materials (e.g. new or improved HSI application cases) developed? | Training materials from Rome translated into Slovak.  
HSI casebook in English, DPS, DPS user guide in Slovene |
| • What are your plans for further development, expansion, regular updating, dissemination and advertising of the package? | Put on homepage.  
Preparing special version for use in project related to drug addiction.  
Data dictionary by the end of 2001.  
Data import from NIHDB. |
| **EUPHIN-EAST pilot network Please describe any recent changes/progress in your country/centre regarding:** | **Comments** |
| • Access to Internet | **Comments** |
| • Hardware and software | **Comments** |
| • Availability of skilled staff | **Comments** |
| • Please describe your experience in testing the EUPHIN-EAST web site. | **Comments** |
### B. For 12 NIS

#### Major points of country reports

<table>
<thead>
<tr>
<th></th>
<th>Armenia</th>
<th>Azerbaijan</th>
<th>Belarus</th>
<th>Georgia</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>How many indicators are present in national DPS?</strong></td>
<td>List of indicators is being updated. Same as HFA indicators 178</td>
<td>143</td>
<td>264</td>
<td></td>
</tr>
<tr>
<td><strong>What are the sub-national divisions of data, i.e. how many regions/districts are presented?</strong></td>
<td>11 regions and 37 districts. 65 regions and 13 city districts</td>
<td>6 oblasts and 118 regions. (72 districts)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Did you update data manually or by using automated import from national health database?</strong></td>
<td>Manually Both, manual and automatic import using special program</td>
<td>Automated import. Automated</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>What version of DPS is used? DOS or WINDOWS?</strong></td>
<td>DOS and WINDOWS. DOS and WINDOWS DOS DOS and WINDOWS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Which language is used (English, Russian or national)?</strong></td>
<td>Preparation of the version in national language is in progress.</td>
<td>The DPS has not been delivered to other organizations. National system was presented at the regional conferences in the whole country.</td>
<td>English (WINDOWS). National, English, Russian (DOS)</td>
<td></td>
</tr>
<tr>
<td><strong>To whom in your country have you demonstrated or delivered DPS?</strong></td>
<td>The chiefs of the Ministry of Health and regions. Heads of Ministry of Health, Goskomstat, health departments of Baku and regions, etc</td>
<td>The DPS has not been delivered to other organizations. National system was presented at the regional conferences in the whole country.</td>
<td>WHO Liaison Officer and Director of the National Centre for Disease Control World Bank experts, Department of Public Health</td>
<td></td>
</tr>
<tr>
<td><strong>What main problems have you met in adaptation and development of the national version of DPS?</strong></td>
<td>Problem with creation of the map, including regional and district divisions.</td>
<td>At the initial phase some problem with creation of the map with regional and district division.</td>
<td>Some initial problem with data import.</td>
<td></td>
</tr>
<tr>
<td><strong>What are the plans for further development, expansion, regular updating and distribution of DPS?</strong></td>
<td>Distribution together with the National Statistical Yearbook on floppy disk; improvement of the medical documentation.</td>
<td>Distribution together with the national Statistical yearbook on diskettes of CD.</td>
<td>Development of two level (region/district) national DPS. Seminars on DPS in the regions.</td>
<td></td>
</tr>
<tr>
<td><strong>What is the provisional date of the first training seminar for the chiefs at national (Ministry of Health) and regional levels?</strong></td>
<td>January 1999</td>
<td></td>
<td>Implementation of the national DPS in the Ministry of Health and regional offices. Annual updates of DPS.</td>
<td></td>
</tr>
<tr>
<td><strong>Needs (training materials, for example, case book with examples in Russian, funding, etc.)?</strong></td>
<td>Funding and training materials in Russian.</td>
<td>Funding and training materials in Russian.</td>
<td>Funding and training materials in Georgian or Russian.</td>
<td></td>
</tr>
<tr>
<td><strong>Direct access to Internet? (IP address)</strong></td>
<td>No Yes, IP = 194.154.92.45 Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td><strong>Do you have the appropriate hardware and software for establishing national server?</strong></td>
<td>No Technical support desirable</td>
<td>It is planned to acquire this.</td>
<td>Dial up connection, speed 33600, Netscape 3.0</td>
<td></td>
</tr>
<tr>
<td><strong>Do you have qualified personnel?</strong></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Major points of country reports</td>
<td>Kazakhstan</td>
<td>Kyrgyzstan</td>
<td>Republic of Moldova</td>
<td></td>
</tr>
<tr>
<td>--------------------------------</td>
<td>------------</td>
<td>------------</td>
<td>---------------------</td>
<td></td>
</tr>
<tr>
<td>How many indicators are present in national DPS?</td>
<td>234</td>
<td>Over 400</td>
<td>259 at country level and 73 - at district level.</td>
<td></td>
</tr>
<tr>
<td>What are the sub-national divisions of data, i.e. how many regions/districts are presented?</td>
<td>15 oblasts, Almaty and 157 regions (but data are loaded at oblast level only)</td>
<td>6 oblasts</td>
<td>4 cities and 40 regions. From 1.1.1999 a new administrative division will be established with 9 regions only.</td>
<td></td>
</tr>
<tr>
<td>Did you update data manually or by using automated import from national health database?</td>
<td>Automated import from the main national database.</td>
<td>Manually, the development of software for automated import is in progress.</td>
<td>Automated import is used for mortality data only.</td>
<td></td>
</tr>
<tr>
<td>What version of DPS is used? DOS or WINDOWS?</td>
<td>DOS, adaptation of Windows version in progress</td>
<td>WINDOWS (special version for the Central Asian countries).</td>
<td>DOS - for entering and editing data, WINDOWS - for presentation.</td>
<td></td>
</tr>
<tr>
<td>Which language is used (English, Russian or national)?</td>
<td>Russian</td>
<td>English and Russian</td>
<td>National Romanian</td>
<td></td>
</tr>
<tr>
<td>To whom in your country have you demonstrated or delivered DPS?</td>
<td>Staff of the Committee of Health, the Medical Insurance Fund and the Government. Package is placed on the server of Committee and is accessible by all staff.</td>
<td>The Ministry of Health and selected local health managers, National Statistical Office, Interstate (CAR) Committee for Economic cooperation. Surgical centre.</td>
<td>Staff of the Ministry of Health, chiefs of regional statistical offices and hospitals.</td>
<td></td>
</tr>
<tr>
<td>What main problems have you met in adaptation and development of the national version of DPS?</td>
<td>Difficulties with using Russian language with the WINDOWS version of DPS.</td>
<td>Development of the list of indicators for districts.</td>
<td>Require additional capabilities for viewing availability of data.</td>
<td></td>
</tr>
<tr>
<td>What are the plans for further development, expansion, regular updating and distribution of DPS?</td>
<td>Enlargement of the indicators list; regular data updating; delivering DPS to regional offices.</td>
<td>Development of the common shared information system for the Ministry of Health, Social Fund and Medical Insurance Fund. Development of DPS and database for regions in 1999 after the reform of administrative subdivision of country is completed.</td>
<td>Loading data for the new administrative division of country; in-depth analysis of the selected issues, e.g. mortality, morbidity, resources; development of a special DPS adaptation together with Romanian colleagues, covering also neighboring regions in Romania.</td>
<td></td>
</tr>
<tr>
<td>What is the provisional date of the first training seminar for the chiefs at national (Ministry of Health) and regional levels?</td>
<td>First half of 1999. Seminars are planned in two phases - for national and regional administrators correspondingly.</td>
<td>April-May 1999</td>
<td>5 seminars (10-20 persons each) are planned. Funds needed.</td>
<td></td>
</tr>
<tr>
<td>Needs (training materials, for example, case book with examples in Russian, funding, etc.)?</td>
<td>Funding and computer equipment for regional offices.</td>
<td>Funding and training materials.</td>
<td>Funding and training materials in national language; Training for 2 staff members in WINDOWS NT and MS SQL Server.</td>
<td></td>
</tr>
<tr>
<td>Direct access to Internet? (IP address)</td>
<td>Yes, since September 1998. Connection via satellite. Provider – REL.COM. IP: 195.82.12.40</td>
<td>No, funding problems.</td>
<td>Presently the Centre has the access to Internet via radio-modem.</td>
<td></td>
</tr>
<tr>
<td>Do you have the appropriate hardware and software for establishing national server?</td>
<td>Standard computer P-166 and operating system Widows/NT</td>
<td>No</td>
<td>Yes, Pentium II-233 Mhz, RAM 32 Mb, Windows NT.</td>
<td></td>
</tr>
<tr>
<td>Do you have qualified personnel?</td>
<td>Yes</td>
<td>Yes</td>
<td>Training course for 2 specialists is required.</td>
<td></td>
</tr>
<tr>
<td>Major points of country reports</td>
<td>Russian Federation</td>
<td>Tajikistan</td>
<td>Turkmenistan</td>
<td>Ukraine</td>
</tr>
<tr>
<td>---------------------------------</td>
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</tr>
<tr>
<td>How many indicators are present in national DPS?</td>
<td>Approx. 300</td>
<td>214</td>
<td>93</td>
<td>Approx 700</td>
</tr>
<tr>
<td>What are the sub-national divisions of data, i.e. how many regions/districts are presented?</td>
<td>80 subjects of the Federation combined into 12 economic regions.</td>
<td>13 regions and 3 oblasts.</td>
<td>6 (5 oblasts and the capital).</td>
<td>25 oblasts and 2 cities</td>
</tr>
<tr>
<td>Did you update data manually or by using automated import from national health database?</td>
<td>Manually or automatic from the main database using special programme.</td>
<td>Manually, development of automated import is in progress.</td>
<td>Manually</td>
<td>Data imported from the file which is prepared manually</td>
</tr>
<tr>
<td>What version of DPS is used? DOS or WINDOWS?</td>
<td>Both DOS and WINDOWS.</td>
<td>DOS and WINDOWS.</td>
<td>Windows</td>
<td>DOS</td>
</tr>
<tr>
<td>Which language is used (English, Russian or national)?</td>
<td>Russian</td>
<td>Russian</td>
<td>Russian</td>
<td>Russian</td>
</tr>
<tr>
<td>To whom in your country have you demonstrated or delivered DPS?</td>
<td>Meeting of the Council of Directors of Information Centres of Health Care (Feb. '98), International Conference &quot;Medical Informatics&quot;, Kiev, Jan. '98. Package distributed to administrations of selected regions.</td>
<td>Staff of the Ministry of Health, specialists of National Statistical Office and Ministry of Environmental Protection, and international agencies.</td>
<td>Staff of Ministry of Health, Central Statistical Office, representatives of international organizations.</td>
<td>Management of the Ministry of Health, distributed to all regional centres of health statistics</td>
</tr>
<tr>
<td>What main problems have you met in adaptation and development of the national version of DPS?</td>
<td>Several minor technical problems. Lack of training materials in Russian to support use and distribution of the package.</td>
<td>Some technical issues are not described in Developer’s manual in sufficient detail.</td>
<td>Lack of training in using DPS.</td>
<td>Some technical problems with data import and printing.</td>
</tr>
<tr>
<td>What are the plans for further development, expansion, regular updating and distribution of DPS?</td>
<td>Further elaboration of indicators list. Demonstration and distribution to regions.</td>
<td>Enlargement of the indicator list up to 570, annual updating of main indicators and distribution.</td>
<td>Adding more indicators, distribution to regions.</td>
<td>Annual updating and use via Internet</td>
</tr>
<tr>
<td>Needs (training materials, for example, case book with examples in Russian, funding, etc.)?</td>
<td>Training materials in Russian and financial support are needed.</td>
<td>Funding for seminars and training materials in Russian. Funds for computers.</td>
<td>Technical and financial support</td>
<td>Funding and training materials in Russian.</td>
</tr>
<tr>
<td>Direct access to Internet? (IP address)</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Do you have the appropriate hardware and software for establishing national server?</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Do you have qualified personnel?</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>
## Annex 2

**WORKING PAPERS AND BACKGROUND MATERIAL**

### Working papers

<table>
<thead>
<tr>
<th>EUR/ICP/INFO 02 05 08/1</th>
<th>Provisional list of working papers and background material</th>
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<tbody>
<tr>
<td>EUR/ICP/INFO 02 05 08/2</td>
<td>Scope and purpose</td>
</tr>
<tr>
<td>EUR/ICP/INFO 02 05 08/3</td>
<td>Provisional agenda</td>
</tr>
<tr>
<td>EUR/ICP/INFO 02 05 08/4</td>
<td>Provisional programme</td>
</tr>
<tr>
<td>EUR/ICP/INFO 02 05 08/5</td>
<td>Provisional list of participants</td>
</tr>
<tr>
<td>EUR/ICP/INFO 02 05 08/6</td>
<td>Proposal for Healthcare Database</td>
</tr>
<tr>
<td>EUR/ICP/INFO 02 05 08/7</td>
<td>Indicators for monitoring progress towards the 21 targets of the health for all policy framework for the WHO European Region</td>
</tr>
<tr>
<td>EUR/ICP/INFO 02 05 08/8</td>
<td>Present list of operational HFA statistical indicators in the HFA database</td>
</tr>
<tr>
<td>EUR/ICP/INFO 02 05 08/9</td>
<td>Present list of data items which are collected for HFA database and suggested additional items to upgrade the list for HFA21 indicators</td>
</tr>
<tr>
<td>EUR/ICP/INFO 02 05 08/10</td>
<td>Intercountry Regional Databases (for selected central and eastern European countries)*</td>
</tr>
</tbody>
</table>

### Background material

<table>
<thead>
<tr>
<th>EUR/ICP/INFO 02 05 06</th>
<th>European Public Health Information Network for Eastern Europe: A report on a WHO meeting, Rome, 11-13 October 1998</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Evaluation of the first EUPHIN-EAST workshop for database managers*</td>
</tr>
</tbody>
</table>

* N.B. All papers are available in both English and Russian except those marked *, where only the English is available.
Annex 3

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