## II. THE IT SUPPORT OF THE REFERENDUM

In Hungary, the information systems of general elections, including national referenda, have covered the entire electoral process since 1990, from the production of the register of voters to the establishment of the final legal result.

The latest developments in information technology have been taken into consideration, as far as possible, in terms of the development of the electoral information systems.

The use of the document network and the integrated implementation of applications currently ensure the achievement of the objectives set:
- uninterrupted, zero-defect operation,
- the computerized establishment of the preliminary unofficial referendum result,
  the support of the official referendum result,
- the maintenance of the fairness of the elections and the enforcement of the basic electoral principles,
- the continuous provision of information to the electoral bodies, the parties, the media and the electorate.

Below, you will find the description of the essential functions of the major information systems supporting the referendum. Apart from the systems described, there are numerous smaller systems in operation, ensuring the meeting of information, management and other special requirements, such as, for example, the broadcast-support system of public-service television channels, the election history database, desktop publishing, the financial information system and the internal administration system.

*II.1 The Election Preparation System managing district-division, the production of the register of voters and the registration of the disfranchised ("NESZA")*

The system is suitable for the receipt and transmission of district-based data through the county database of the updated population-registration system. It manages the data of the disfranchised, received from the central system.

The system of programs enables the printing of registers of voters and notification coupons in both centralised and decentralised modes (local municipality printing mode).

The system is prepared to meet the statistic information requirements of political parties, electoral bodies and those eligible to requisition other services.

*II.2 The election-preparation system ("VER") and the system supporting the transmission and receipt of typographical data*

The production of electoral-district identifiers and sample protocols is an important element of the system;

- it provides quantitative data for the contractor(s) providing the logistic services and materials in a previously agreed form;
- the system is suitable for the transmission of data, in a pre-agreed form, to the estimation/logistic system;
- the VER provides the data for the foundation of the vote-summarising database.

*II.3 The Election Day system*

The election-day system uses data from the Election Preparation System to build up its database.

The system to be implemented will enable the registration of participation data during the day, the summarising of the data received and the provision of national and regional participation data through the information system. The system supports the reporting of extraordinary events.

The main features of the preliminary vote-summarising system starting to operate in the evening, after the opening of the ballot box, conform to the architecture applied for the parliamentary election, i.e. the central application performs all processing operations.

The counting of the votes begins after the closing of the ballot boxes. With a view to a fast results summary, data sheets are issued on the basis of the result of the first count as provided for in the Ministry of the Interior decree, where disputed votes may also be recorded. The complete and verified data sheets are transmitted by fax, telephone or car to the nearest document office or to the mayor's office operating the local data registration system, where they are recorded through the system. Data are sent via the network to the central database, where the calculation of preliminary results is continuously updated, assigning the respective levels of data-processing and taking into account disputed votes.

The system ensures data transmission to the information system and the television broadcast-supporting system. While continuously updating the preliminary 'flash' results, the election-day system provides the latest data to the information in every 5 minutes.

The system ensures the management of inoperative electoral districts. During the elections, the operation of an electoral district could be interrupted by external factors (e.g. a bomb alarm). In such cases, the change needs to be registered and the system has to notify the electoral bodies of the discontinuance of the operation of the electoral district. The maintenance of the records is of extreme importance also in terms of the feasibility of the verification of completeness.

Following the closure, the essential function of the system is to provide the required data for the NEO report, the quick information brochure published in four plus one languages the day following the election.

### II.4 The Internet Information System of the Definitive Referendum on the European Union

During the preparation and the administration of the referendum, the information system must ensure the secure provision of a wide range of information to the professional electoral bodies, the general public, the parties and the media. Although speed and comprehensibility are the chief considerations in terms of the displaying of information, aesthetic and formal ingredients are also important. Apart from simple data (result protocols), the system can be queried for pre-programmed analyses and comparative analyses with the data of previous elections.

Information on both the election preparation process and the establishment of the result will be provided over the Internet/intranet in the way it is done at the parliamentary elections.

As usual, public-service televisions will continuously be informed on the day of the voting as well as continuously updated information will be provided to TELETEX services.

Publications will be produced on the events of the referendum and a CD including the complete body of the electoral district protocols.

### II.5 The final vote-summarising system

The period of the final vote summary starts at the closing of the preliminary vote summary and lasts until the establishment of the final result. The primary function of the system is to support the result-establishment activity of electoral offices.

During that phase, the processing of data is restricted to the electoral district protocols and the data concerning legal remedy events that affect the processed protocols.

Following the closing of legal remedies, the final results are used to produce the CD including the final election result data.

The NEC report is produced and the data are loaded into the Electoral History Database.

### II.6 The system for reporting the probability of electoral delicts

The techniques of statistical analysis applied at the 2002 parliamentary, municipal and minority elections are adapted to the referendum on April 12, 2003.

The software ensures the registration of data of voters voting with a voucher and the data of the issuance of vouchers. The verification and comparison of recorded data will enable the identification of fraud.

With respect to the preliminary and final results, the system facilitates the searching of suspicious cases by a complex analysis of the vote-summarising database.

The competent electoral bodies can take the appropriate measures following the analysis of data received.

*II.7 Election Management System*

Using modern information tools and the possibilities offered by the private computer network between the document offices, the Election Management System (VÜR) performs the management functions related to the elections, their organisation and the communication between the electoral bodies. Consequently, access to the system is restricted to authorised computers and users.

The primary purpose of the system is the operation of an IT communication channel between the national, regional and local electoral bodies. This channel provides registered users with electronic mail and a forum, divided into various topics, which operates as a notice board, enabling the sharing of comments and the requesting of assistance.

Furthermore, the system operates as a database including the recorded personal data in a regional system, each record comprising a person's name, address, telephone and fax numbers and e-mail address. It also includes further data from the archived material of the elections conducted since the putting into operation of the system as well as other data related to various elections – e.g. extracts of electoral protocols.

In the Law and Document Repository, users will find important regulations and other electronic material related to the management of the system or to the electoral processes.

The Electoral Calendar provides information to all on important dates and periods as well as any other important events, dates and venues in connection with the elections.

The Help Desk heading connects to the persons in charge of other election-related systems, networks and projects, who can assist in resolving any problems encountered by users of the system.

*II.8 Internet information system*

The service is available at the www.valasztas.hu; www.eu-nepszavazas.hu; and www.unioscsatlakozas.hu sites, in Hungarian and as a summary in the official languages of the EU, with the primary focus on the English version.

Its information content covers the documents generated during the administrative, legal and information technology preparation and the administration of the referendum as well as the data of the referendum result.

*II.9 The services of the Internet Information System*

The remarkable services of our web pages include the dynamic data-provision, providing continuous information on the day of the referendum concerning the number of voters going to the polls. In the evening of the referendum, information data are available on the actual state of the counting of the votes.

*II.10 The menu structure of the Internet service*

The main menu consists of graphic images and text parts. Each graphic image serves as a link to the various sections of the system.

*The main menu consists of the following parts:*

**County information**

Provides brief information on Hungary (in Hungarian and the official languages of the Union).

**EU referenda**

The referendum data of EU member states (in Hungarian only).

**Legal**

This section contains the regulations that serve as guidelines concerning the referendum for citizens and the electoral bodies.

They include:

- the Constitution (in Hungarian and the official languages of the EU)
- laws (in Hungarian and the official languages of the EU)
- Parliament decisions (in Hungarian and the official languages of the EU)
- decisions of the Constitutional Court (in Hungarian)
- the orders of the Supreme Court (in Hungarian)
- decrees of the Minister of the Interior (in Hungarian and the official languages of the EU)
- measures of the head of the NEO (in Hungarian)

**NEC**

The names and photographs of the members of the NEC, the party membership of delegated members

the resumes of the NEC members (in Hungarian)

NEC communications (in Hungarian)

*Information*

This section contains, in an easy-to-understand form, the general-purpose, informative documents and information concerning the referendum.

The information includes:

- Electoral district information: county, settlement, no. of voters, addresses of electoral districts (in Hungarian and English);
- Information posters on the voting (in Hungarian and the official languages of the EU);
- Information for the public (in Hungarian and the official languages of the EU);
  Promotional video and audio materials (in Hungarian and the official languages of the EU);
- Press information (video and audio materials, images) (in Hungarian and English);
  Election brochures (in Hungarian and English);
- Election brochures, topic summaries (in Hungarian and the official languages of the EU);
- FAQ (in Hungarian and English);
- Definitions
- General election terms (in Hungarian)
- Referendum terms (in Hungarian and the official languages of the EU);
- Administrative map of Hungary;
- Elections Glossary;

*Calendar*

(in Hungarian and the official languages of the EU);

The Referendum Calendar serves the purpose of displaying, with graphic support, the events associated with the various electoral procedures and their sequence.

*Electoral district information:*

county, settlement, no. of voters, addresses of electoral districts (in Hungarian and English)

*Referendum IT Information*

(in Hungarian and the official languages of the EU);

The easy-to-understand description of the VÜR, the IT behind the referendum.

*Interim reports*

(in Hungarian and the official languages of the EU);


*Results*

(in Hungarian and the official languages of the EU);

*Analyses*

(in Hungarian and the official languages of the EU);

*Extraordinary incidents*

(in Hungarian and the official languages of the EU);

*Previous elections*

The most important information (in Hungarian and the official languages of the EU);

- Election history (in Hungarian)
- The 1997 referendum (in Hungarian and English)
- Parliamentary elections, 1998 (in Hungarian and English)
- Municipal elections, 1998 (in Hungarian)
- By-elections, 1999-2002 (in Hungarian)
- Parliamentary elections, 2002 (in Hungarian and English)
- Municipal elections, 2002 (in Hungarian and English)
- Minority municipality elections, 2003 (in Hungarian)

*First-time voters*

(in Hungarian)

*Electoral Information Services*

(in Hungarian)

Central Electoral Information Service (in Hungarian and English)

*Links*

to EU information sites

*Correspondence*

(in Hungarian and English)