

EXPLANATORY NOTES

- 1. ICT** is the combination or interaction of IT and Communication technologies to facilitate the better delivery of products and services or information through electronic means.
- 2. Bandwidth** means how much information can be carried in a given time period (usually a second) over a wired or wireless communications link. In simple terms, how much 'stuff' can be sent through a connection, usually measured in bits per second. More technically, bandwidth is the width of the range of frequencies that an electronic signal occupies on a given transmission medium.
- 3. IT** is a broad term covering all aspects of managing and processing information. It basically comprises computers, data processing equipment and peripherals, software products and services. Computers are, in fact, the drivers for IT diffusion in the economy.
- 4. Website** is a collection of Web files on a particular subject that includes a beginning file called a 'home page'. For example, most companies, organizations, or individuals that have Websites have their home page from where all the other pages on their particular site can be accessed.

5. **Network** relates to the hardware and software connections between computers allowing information to be shared and electronic communications to take place.
6. **Information Highway** is a combination of information and communications technology for facilitating high speed transmission of data and information.
7. **E-Democracy** is the direct participation of people in the government processes.
8. **Portal** is a term, generally synonymous with gateway, for a World Wide Web site that is or proposes to be a major starting site for users when they get connected to the Web or that users tend to visit as an anchor site. There are general portals and specialized or niche portals.
9. **Server** In general, a server is a computer program that provides services to other computer programs in the same or other computers. The computer that a server program runs in is also frequently referred to as a server (though it may contain a number of server and client programs). In the client / server programming model, a server is a program that awaits and fulfils requests from client programs in the same or other computers. Servers also denote powerful computers that come next in hierarchy to the mainframes in the classification of computers.

- 10. LAN** A local area network (LAN) is a group of computers and associated devices that share a common communications line or wireless link and typically share the resources of a single processor or server within a small geographic area like an office building. Whereas, a wide area network (WAN) is any Internet or network that covers an area larger than a single building or campus. It is a geographically dispersed network.
- 11. Gateway** Hardware or software that translates between two dissimilar protocols.
- 12. Node** is any single computer connected to a network.
- 13. E-commerce** Electronic commerce or e-Commerce is the buying and selling of goods and services on the Internet, especially the World Wide Web.
- 14. Dial-up** pertains to a telephone connection in a system of many lines shared by many users. It is established and maintained for limited time duration. The alternative is a dedicated connection, which is continuously in place.
- 15. VSAT** Very small Aperture Terminal is a satellite communications system that serves home and business users. VSAT end users need a box that interfaces between the user's computer and an outside antenna with a transceiver. The transceiver receives or sends a signal to a satellite transponder in the sky. The satellite sends and receives signals from an earth station computer that acts as a hub for

the system. Each end user is interconnected with the hub station via the satellite in a star topology. For one end user to communicate with another, each transmission has to first go to the hub station which retransmits it via the satellite to the other end user's VSAT. VSAT handles data, voice, and video signals.

16. **ISP** Internet Service Provider is a organization that provides access to the Internet and other related services.
17. **Fibre optic (or optical fibre)** refers to the medium and the technology associated with the transmission of information as light impulses along a glass or plastic wire or fibre. Fibre optic wire carries much more information than conventional copper wire and is far less subject to electromagnetic interference.
18. **Thin Client System** is a system by which a giant server somewhere can host the software that businesses, schools, stock markets, etc. need. The server can also host the data. The end users need only some very small PCs, much thinner than the usual bulky boxes, through which they can access the particular data and software they need from the servers.
19. **Interoperability** is the ability to have applications and computers from different vendors work together on a network.
20. **ADSL** is short for asymmetric Digital Subscriber Line, a new technology that allows more data to be sent over existing

copper telephone lines. ADSL supports data rates from 1.5 to 9 Mbps when receiving data (known as the downstream rate) and from 16 to 640 Kbps when sending data (known as the upstream rate).

21. **ICMT** is the addition of Multimedia to ICT. Since Multimedia is a very important feature for rendering interactive ness, specially for e-Governance portals focused on rural development, the thrust is moving towards ICMT.
22. **Phishing** 'Phishing' is a technique used to gain personal information for the purpose of identity theft. 'Phishing' emails give themselves away by telling us that there is a reason why we must provide personal details such as our Internet banking log on, password, credit card number or personal I identification number by reply email or through a website. It is common for 'Phishing' emails to contain links to a website that is a convincing replica of the financial institution's home page.
23. **Cryptography** - Converting information into a secret code, using complex mathematical algorithms, so that it can't be read by anyone who does not already understand the code.
24. **Encryption** - The process of applying cryptography to an email message or document so that it can be safely transmitted over networks such as the Internet.
25. **Digital certificates** - An electronic file that contains information which uniquely identifies an individual or business when using online services.
26. **Public and private keys** - For maximum security, digital certificates are used in conjunction with public and private

keys. When a message is encrypted, the system uses both a public key (which is freely supplied to anyone who needs to receive information from the sender) and a private key (which is known only to the sender, and ensures that messages from that sender can't be forged by others).

- 27. Outsourcing** - Paying an outside company to provide services such as information technology management, rather than employing internal staff.
- 28. Firewalls** - Software or hardware systems to protect PCs and networks from unauthorised access.
- 29. Viruses** - Malicious pieces of computer code which make unauthorised changes to your PCs, causing them to malfunction or deleting data. They often distribute themselves via the Internet or email. Well-known recent examples include Melissa and the Love Bug. They can be prevented with anti-virus software.
- 30. Hackers** - Someone who attempts to gain unauthorised access to a computer system, often for fraudulent purposes.
- 31. SSL (Secure Sockets Layer)** - The most widely used security protocol on the Internet, often used for online shopping sites. SSL creates a secure channel so that data can be sent between a website and an individual PC without being intercepted by others.