

SMASH project AC018

- storage for multimedia application systems in the home -

- *purpose:* to show technical feasibility of an ***integrated storage unit*** that is connected to the network and other consumer equipment and enables to download, store and retrieve information efficiently for all future multimedia applications.
- *partners:* Philips, Thomson, Olivetti, Technical University Delft, University of Essen, Tandberg, University Ljubljana
- *contact person:* Dr. E.H.J. Persoon/Philips



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Required tasks:

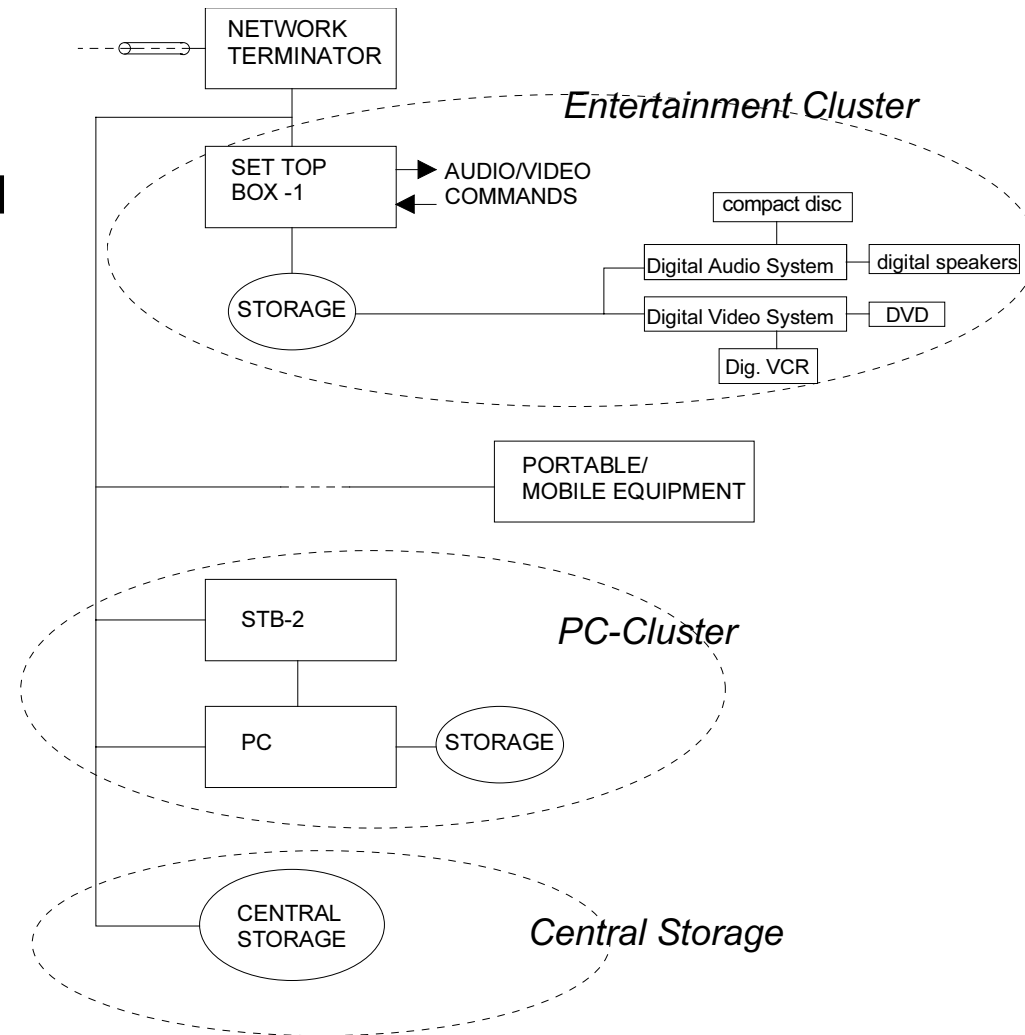
- architecture of the integrated storage unit: tape drive, disk drive, digital interface
- storage related issues: variable bit rate recording, storage of encrypted signals, visual search
- interfacing to a settop unit and a PC
- open interface for storage units
- analysis and requirements from applications and prototyping
- trial definition



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- simple version: STU connected digitally to SMASH
- more extensive: SMASH also connected to PC
- most extensive: SMASH used as a home server connected to other equipment via a home network



SMASH storage device

Reasons for using local storage:

- fast access to data independently of the network load
- downloading during off-peak hours => reducing costs
- avoiding re-transmission of the same information
- fast delivery of multimedia services
- regular update of the delivered services

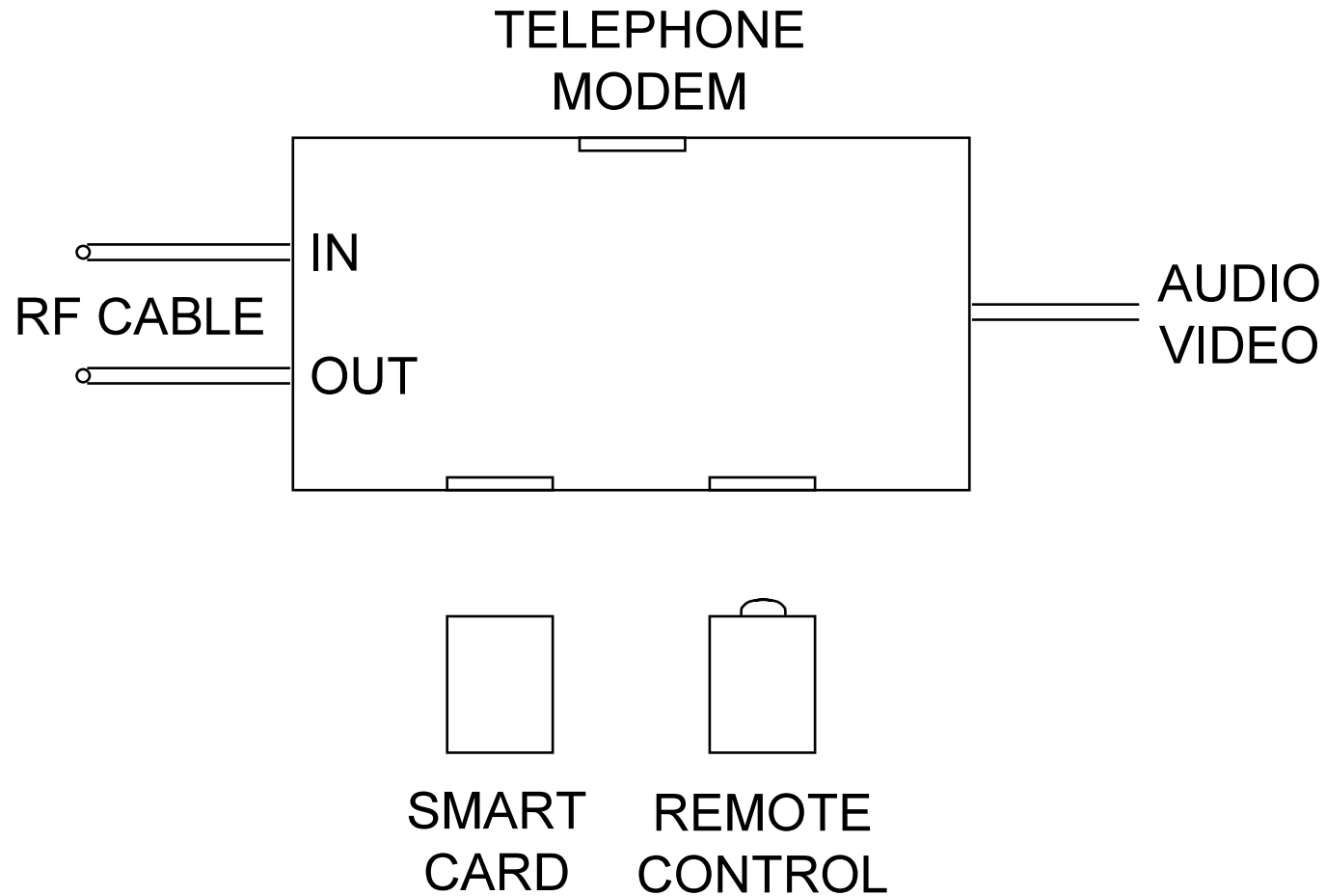


Applications

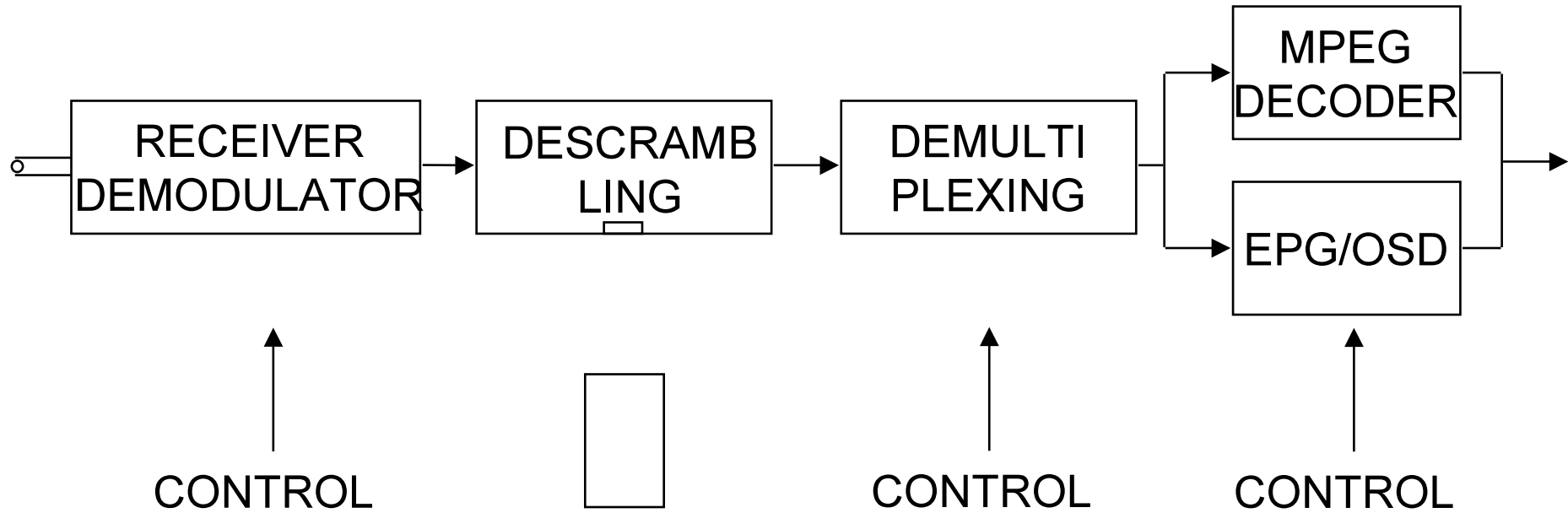
- recording of extensive amounts of data
- record & play multiple real time files simultaneously
- continuous playing and recording of extensive real time files
- database management and inter-content link
- fast user access to extensive multimedia databases
- visual search for huge multimedia databases



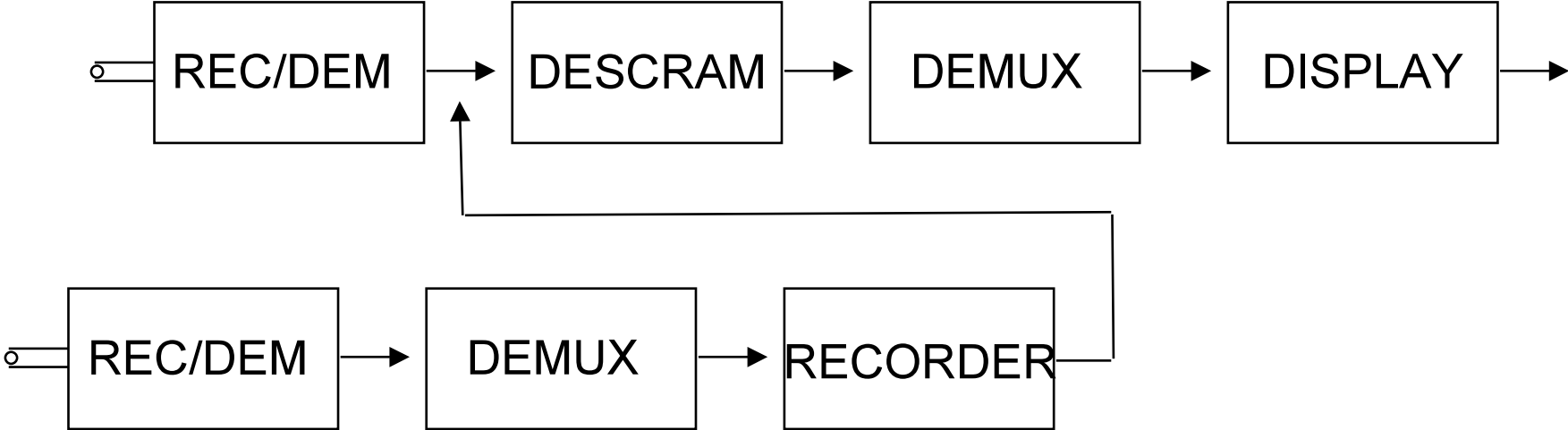
The Set Top Unit now



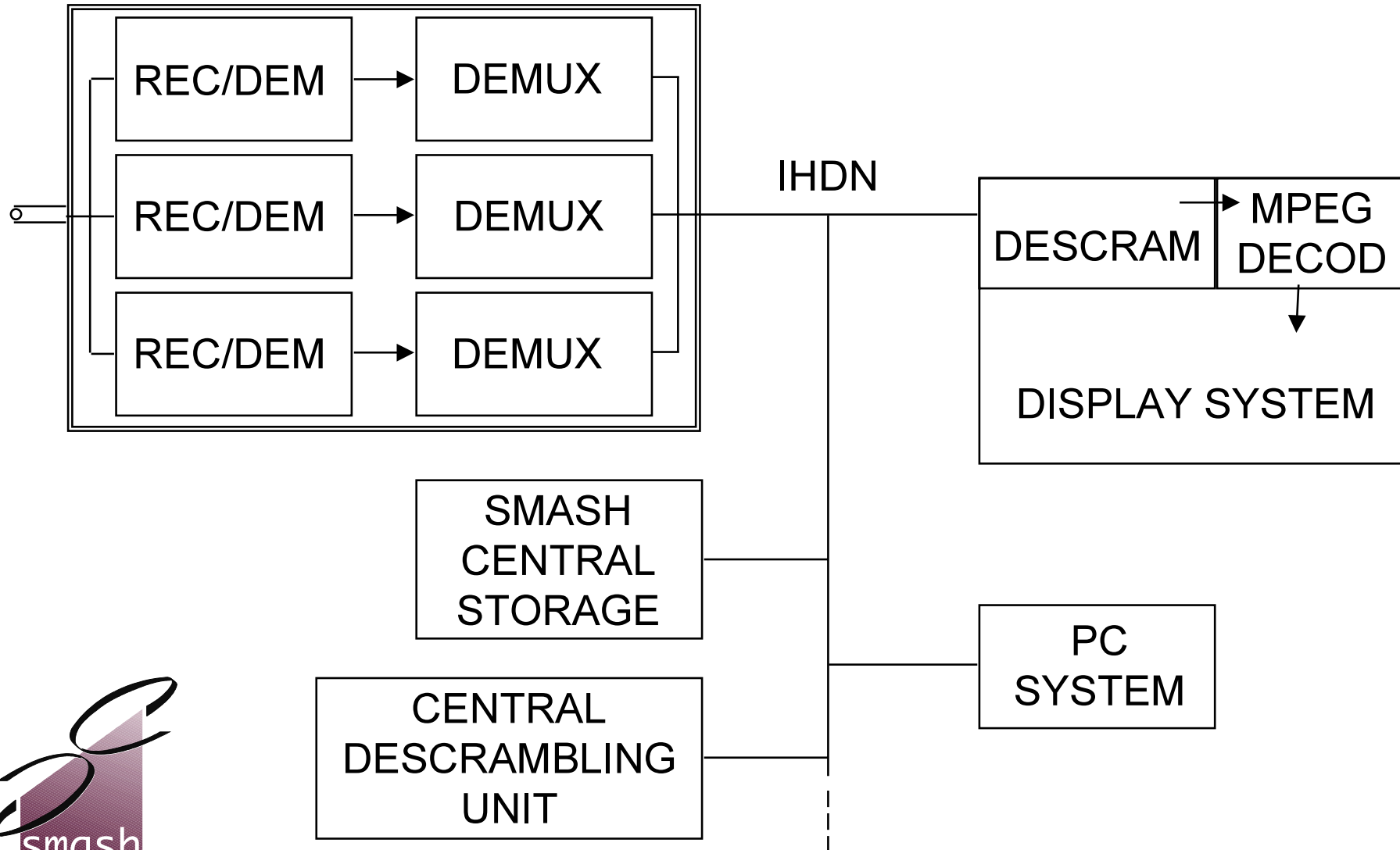
And its Parts



Connection with Storage

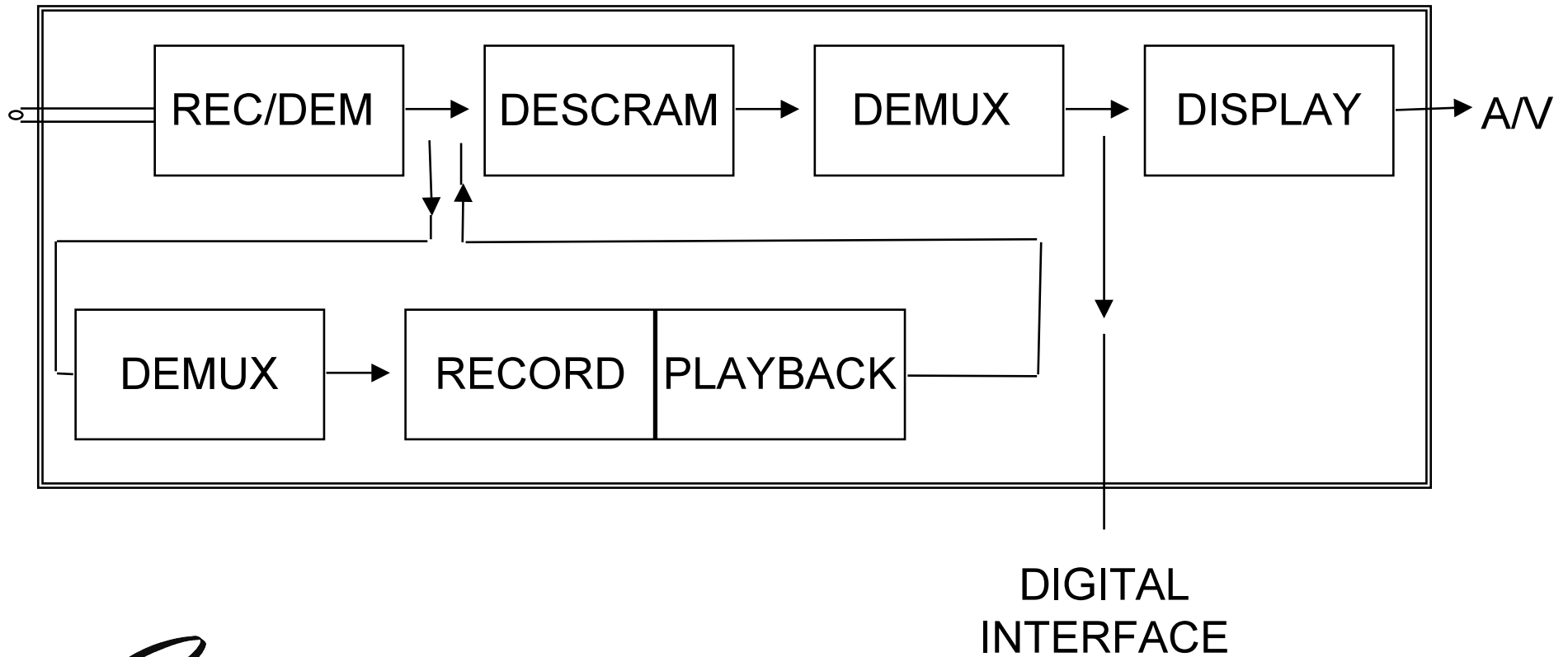


Preferable final system



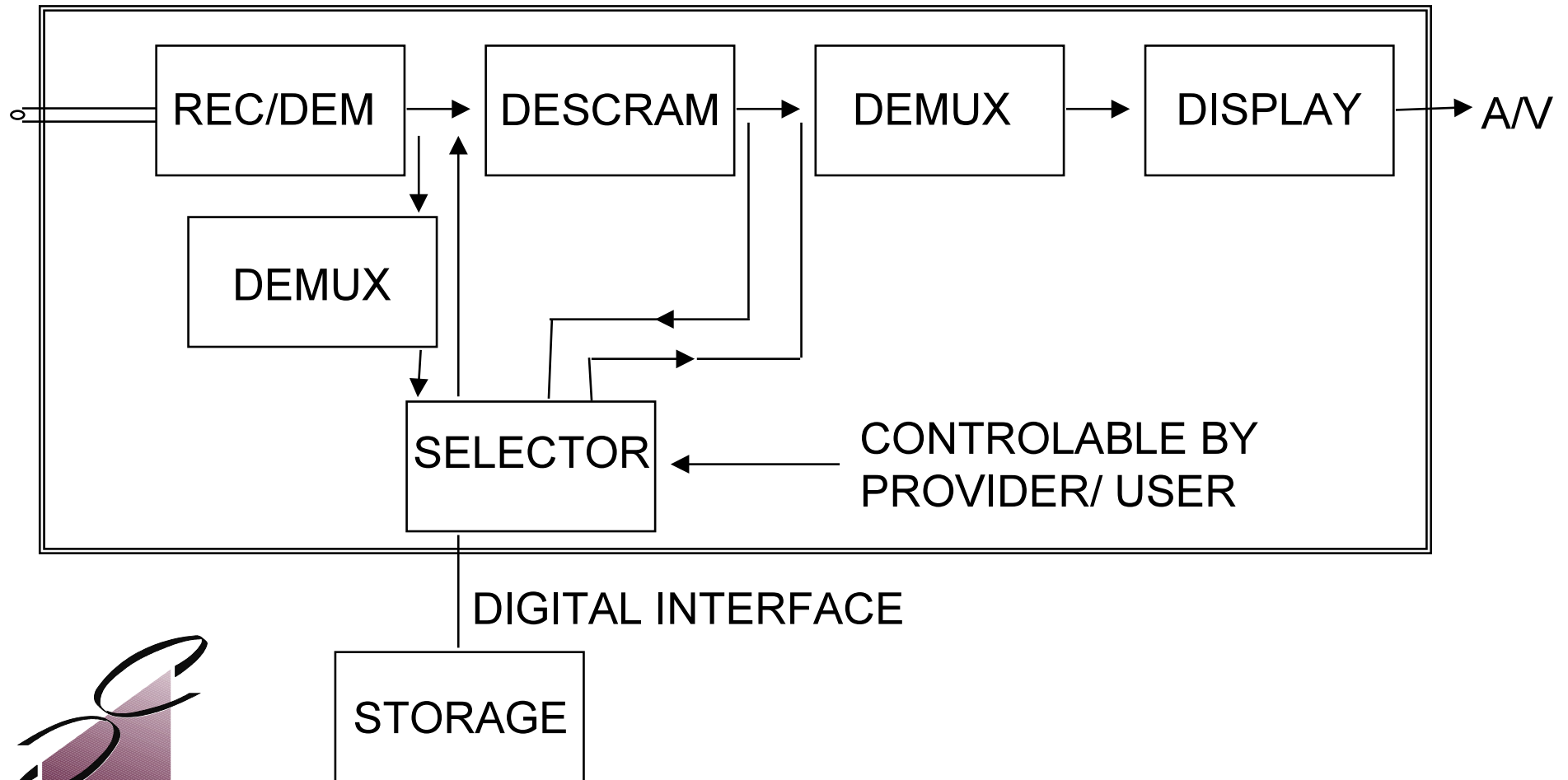
Preferable first systems

Set Top Unit with embedded storage



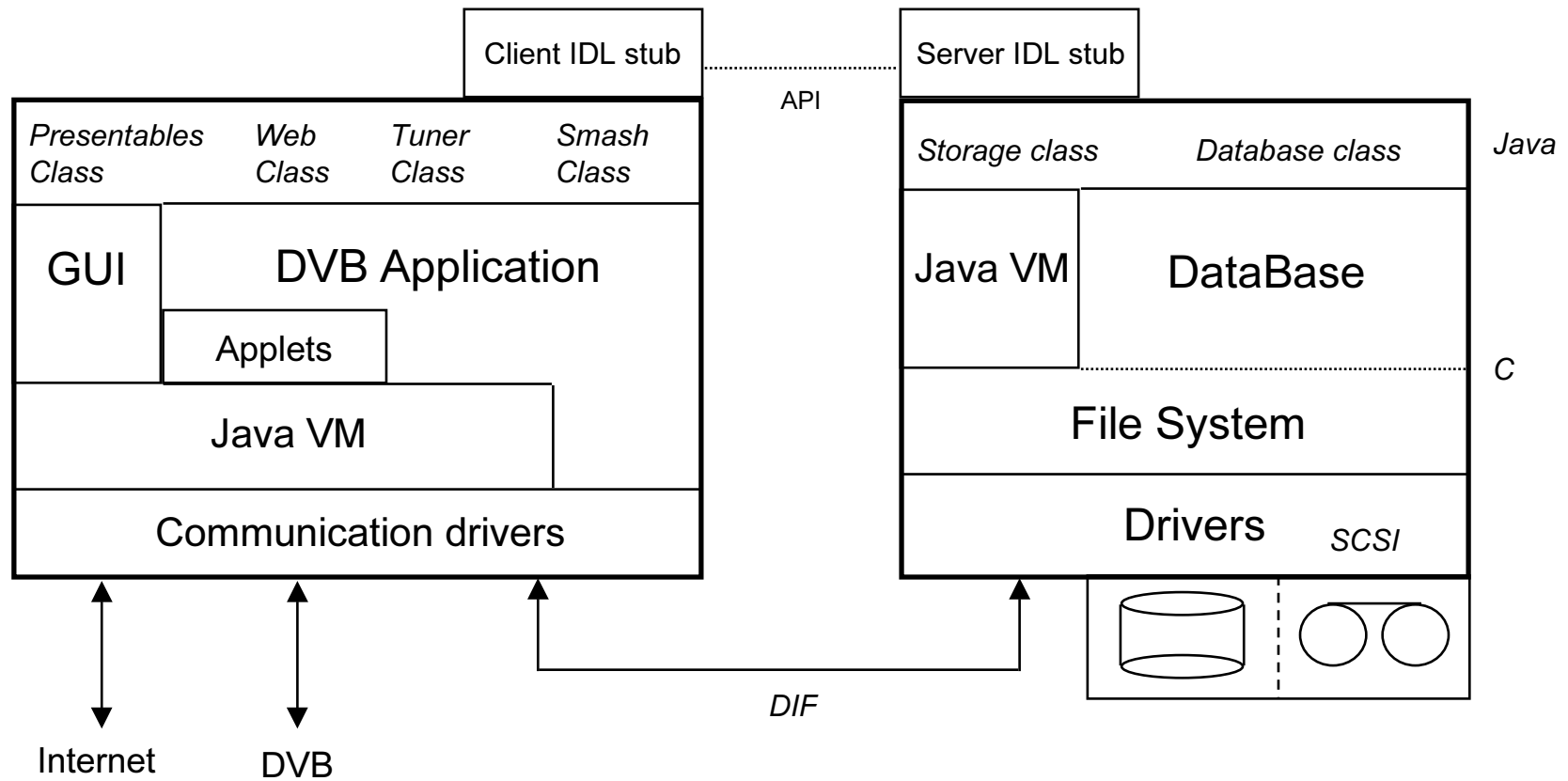
Preferable first systems

Set Top Unit with outside storage



Client

Server



Necessary steps

- **CONTENT PROVIDERS**

Provide extra information for:

- * fast downloading
- * incremental automatic information update
- * building local information database

- **SERVICE PROVIDERS**

- * conditional access system
- * billing system for the usage of locally stored information

- **LEGAL AUTHORITIES**

- * provide legal framework for copy management system

