

Business Models Driving Specifications

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Business Models Driving Specifications

"Start by doing what's **necessary,
then do what's **possible**, and
suddenly you are doing the
impossible."**

Saint Francis of Assisi

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CONTENTS

- **Necessary** - TV-Anytime Forum and Business Models Group
- **Possible** - Phase One Services and Features
- **Impossible** - Post-Phase One Services and Features

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TV-Anytime Forum over 160 member companies



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- The *TV-Anytime* Forum is a non-profit association of organisations which seeks to develop specifications to enable audio-visual services based on **persistent local or online storage**
- Membership is open to all who sign the Memorandum of Understanding and attend meetings
- Full information at: <http://www.tv-anytime.org>

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TV-Anytime Challenges for Business Models WG

- Keeping up with industry developments, so that TVAF standards are **not too little, too late**
- Ensuring content providers are encouraged to **develop material** for personal TV services
- Documenting new revenue-producing business scenarios which capitalize on TV-Anytime standards to provide **interoperable systems and services** to large groups of users

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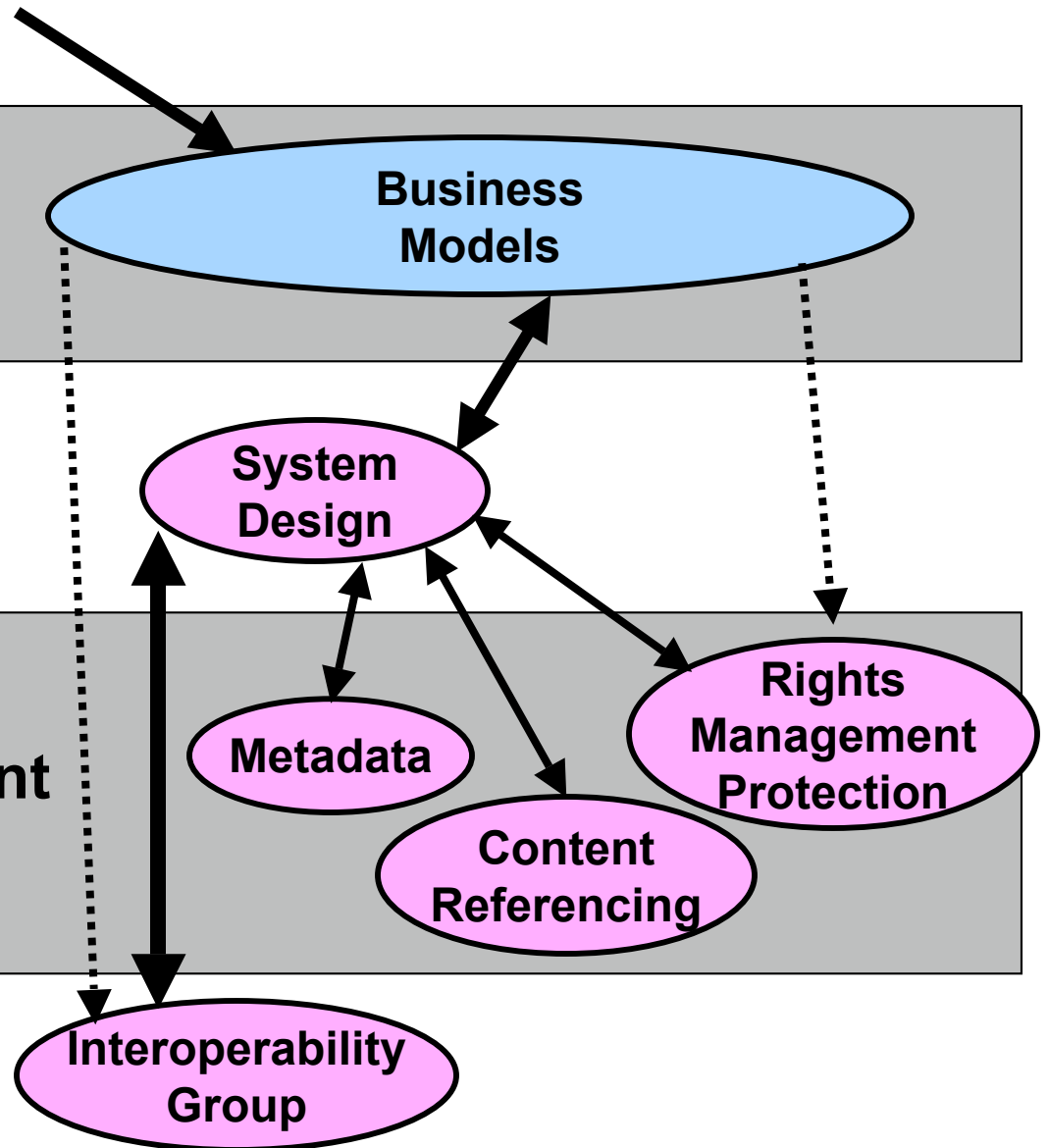
•Stakeholders interests

•Scenario Development
informative

•Specification Verification

•Specification Development

•Industry adoption

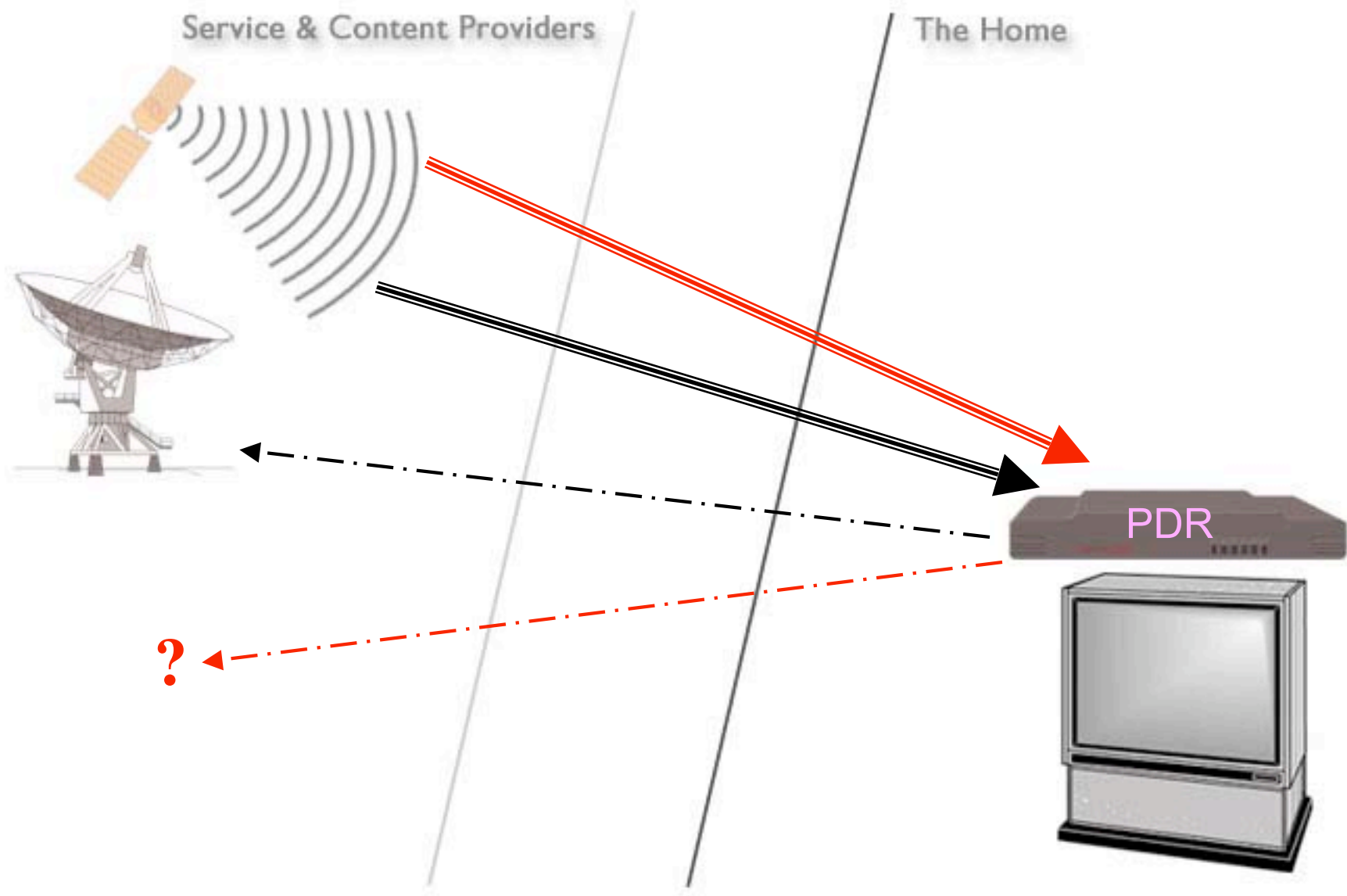


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Business Models Group Purpose & Objectives

- TV-Anytime specification requirements definition for all **stakeholders**
 - Content/service providers, including advertisers
 - Manufacturers
 - Consumers
- Work with TV-Anytime technical groups to determine which **requirements to enable** in each phase of the TV-Anytime specifications

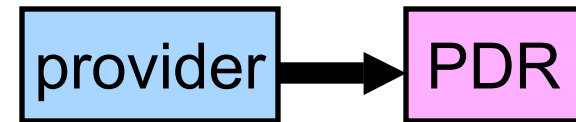
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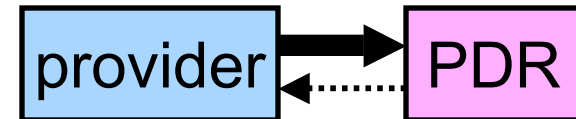
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The Three TV-Anytime Models

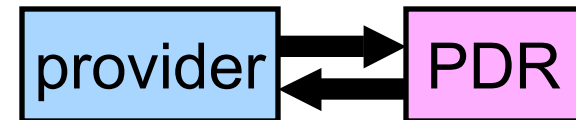
Model 1: **Broadcast**
(uni-directional)



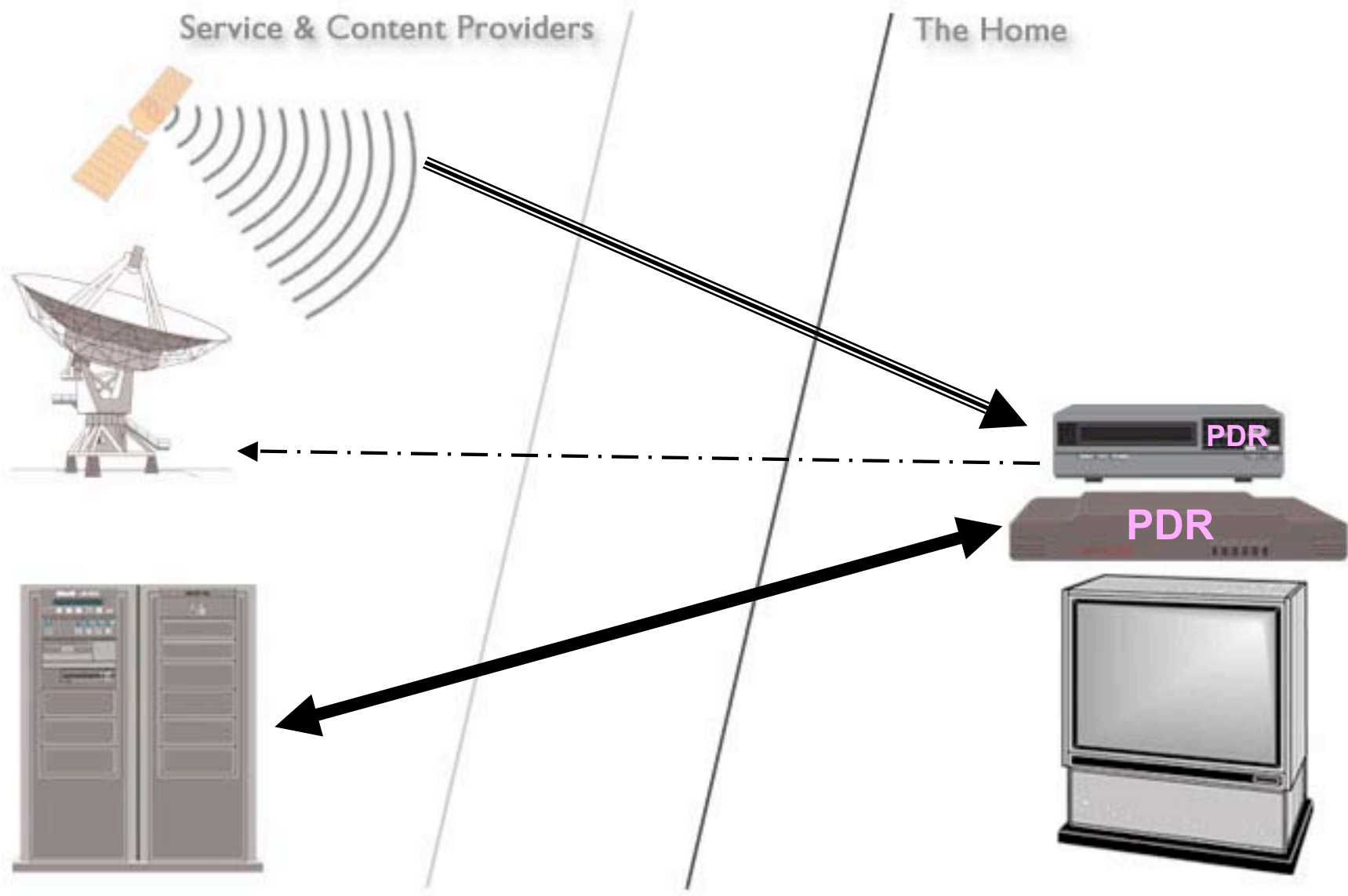
Model 2: **Consumer Response**
(bi-directional)



Model 3: **Broadband**
(bi-directional)



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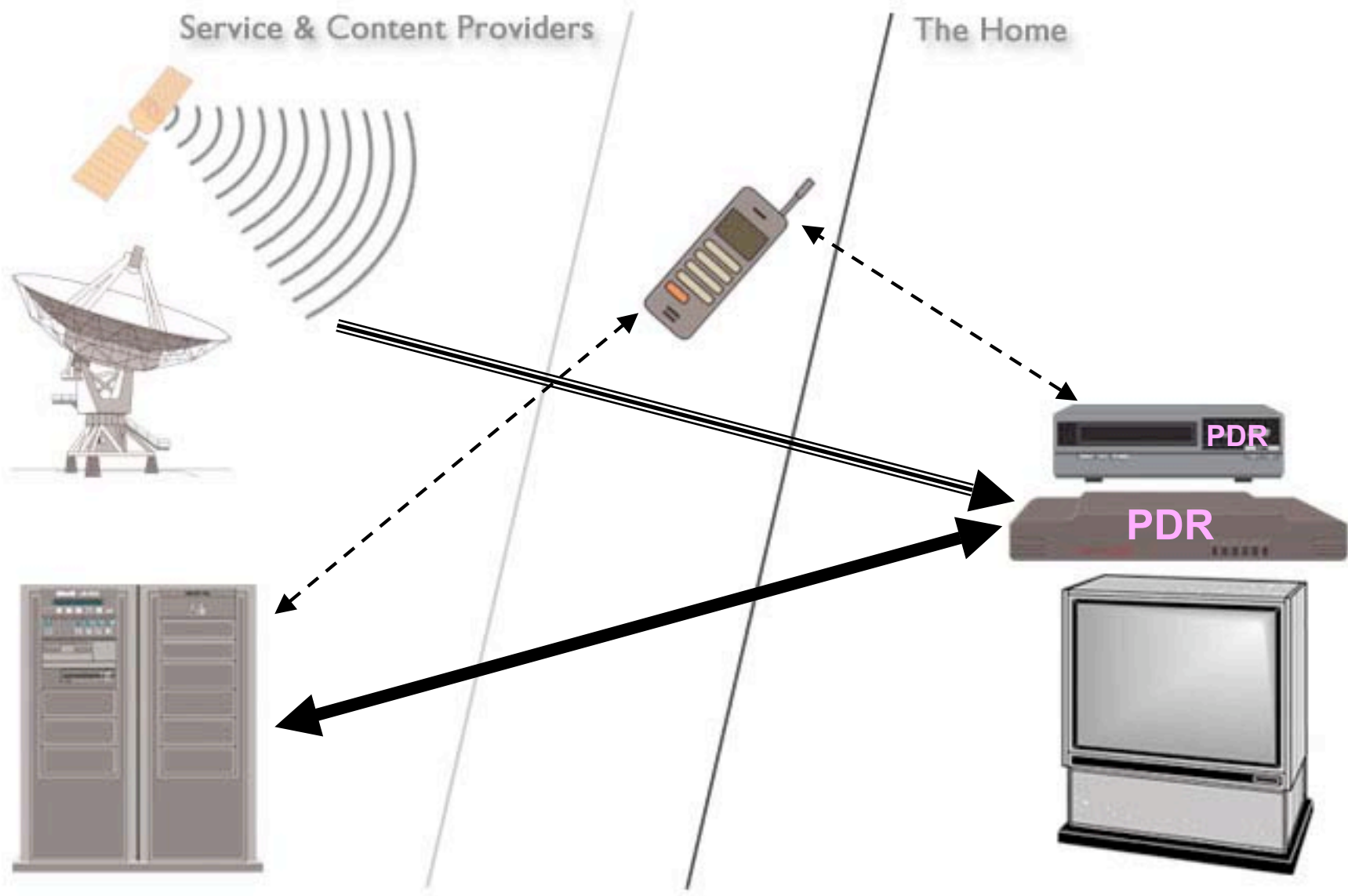


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TV-Anytime Example Phase 1 Features

- Multi-user **preference support** and portable profiles
- Personal **book marking/indexing** of recorded content
- Playback content as **virtual programmes** (e.g. highlights)
- Dynamic **segment insertion** during playback (e.g. targeted advertisements)
- **Updating** recorded content with newer versions (e.g. keeping news, fresh)
- Verification of **usage** of content on PDR
- Consumer-controlled secure transfer of content from local to **remote 'personal' storage**

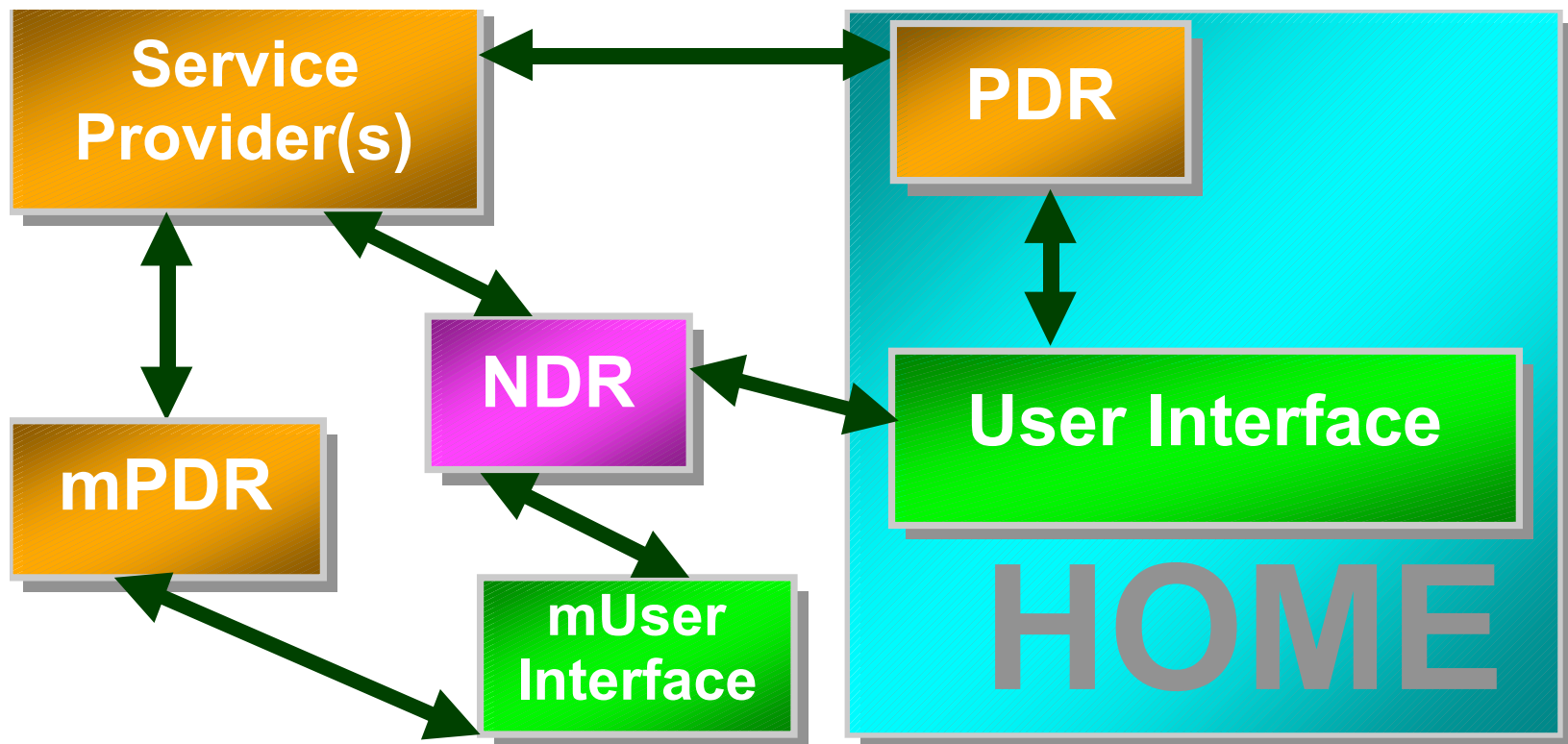
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TV-Anytime Conceptual Connectivity Diagrams from document Specification SP001

Number 6 of 6 - Mobile TV-Anytime implementation



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TV-Anytime Post-Phase 1

"Change is the **progress by which
the future **invades** our lives."**

Alvin Toffler, Future Shock, 1970

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TV-Anytime Post-Phase 1 Considerations

- What services/products do **consumers want**?
- What capabilities are currently being developed and deployed by the industry?
 - **Integrated** TV/PC/mobile/internet hardware and services
 - **Removable** media; content archiving
 - **Targeted**, personalised content delivery systems
 - In-home servers/**personal networking**
- What services/products does **industry want** to provide?
- What services/products will **generate revenue**?

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TV-Anytime Post-Phase 1 work

- **NEW SERVICES** (some aspirational, some already in the market)

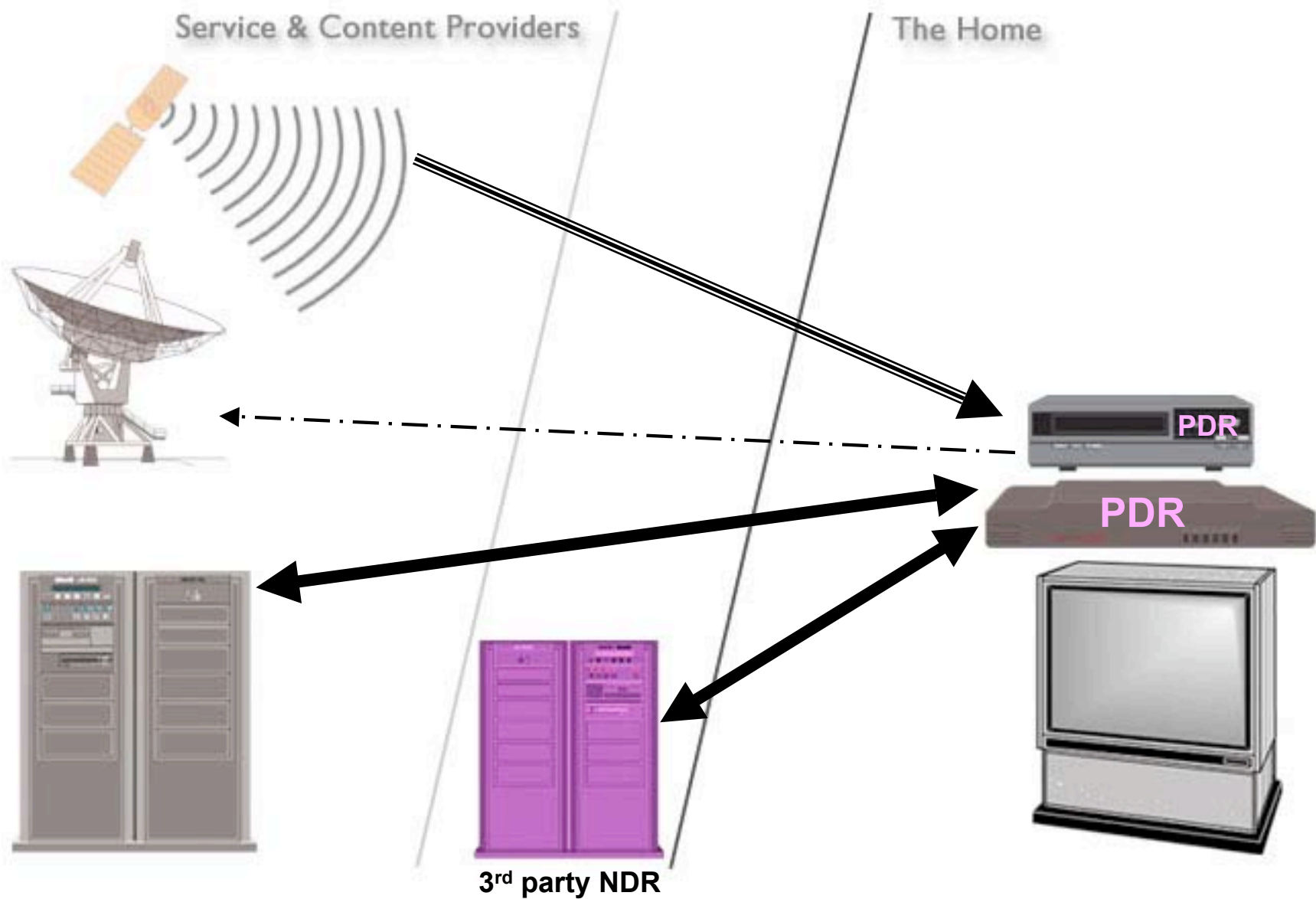
eg: 1-**virtual communities** and families sharing content. 2-editing applications. 3-home broadcasting. 4-non-linear content. 5-**personal networking**. 6-proprietary application support -iTV/games etc).

- **SUPER-DISTRIBUTION** scenarios - including storage external to the local/physical device such as mobile/PDA/3rd party NDR

- **RIGHTS GROUP** synchronisation. Such as consumer vs providers domains in hybrid PDR/NDR environments. (The complexities of removable media, mobile devices, personal networks etc)

- **ADVANCED STANDARDS**. Synchronisation, collaboration and identification with other standards bodies in advanced stages and close links with interoperability groups.

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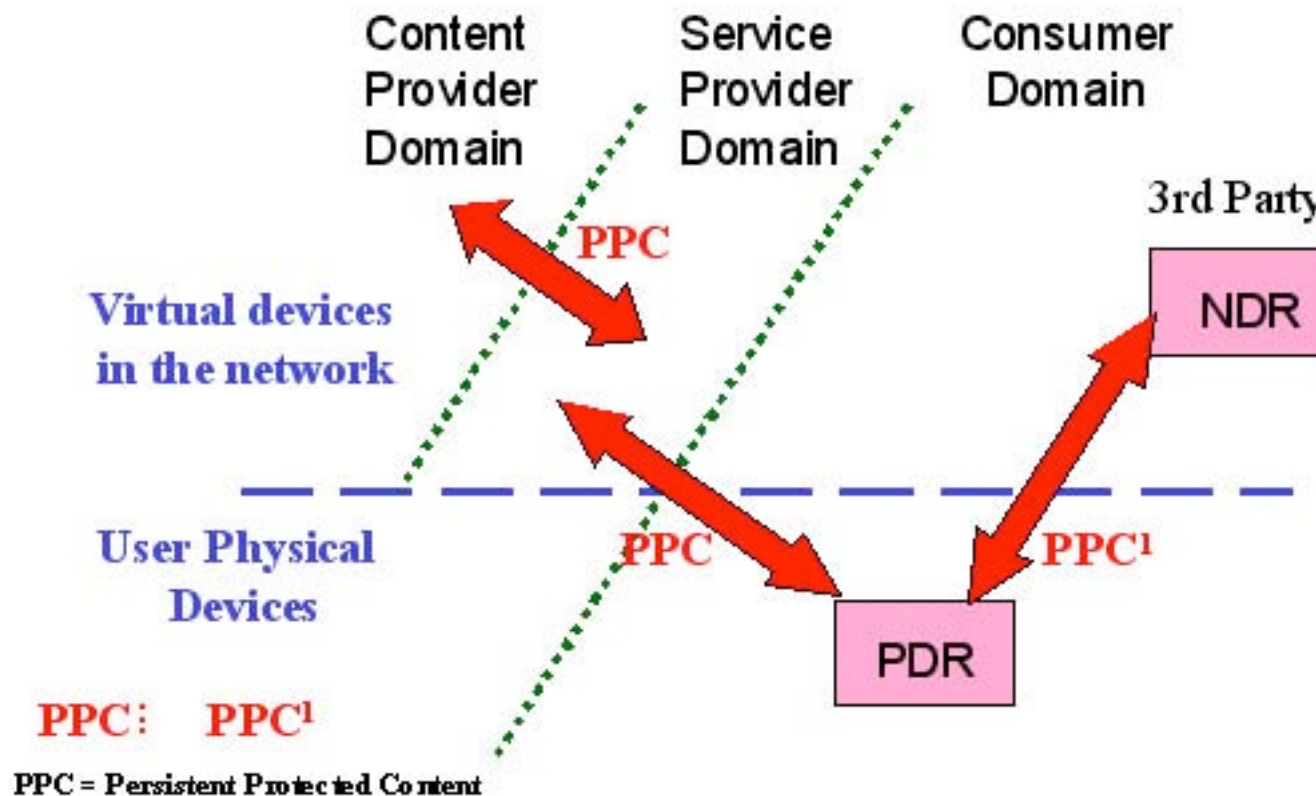


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Consumer Domain example 4 of 5 - External Storage (user access)

From SP001 Appendix A

This example also uses a 3rd party NDR to provide adequate storage for the content required by the consumer. However in this example, the consumer directly selects and accesses the 3rd party NDR. It may be essential that the links to the consumer have similar capabilities. The benefit to the consumer is that they can off-load the storage requirement from their PDR to the NDR (e.g. archiving).

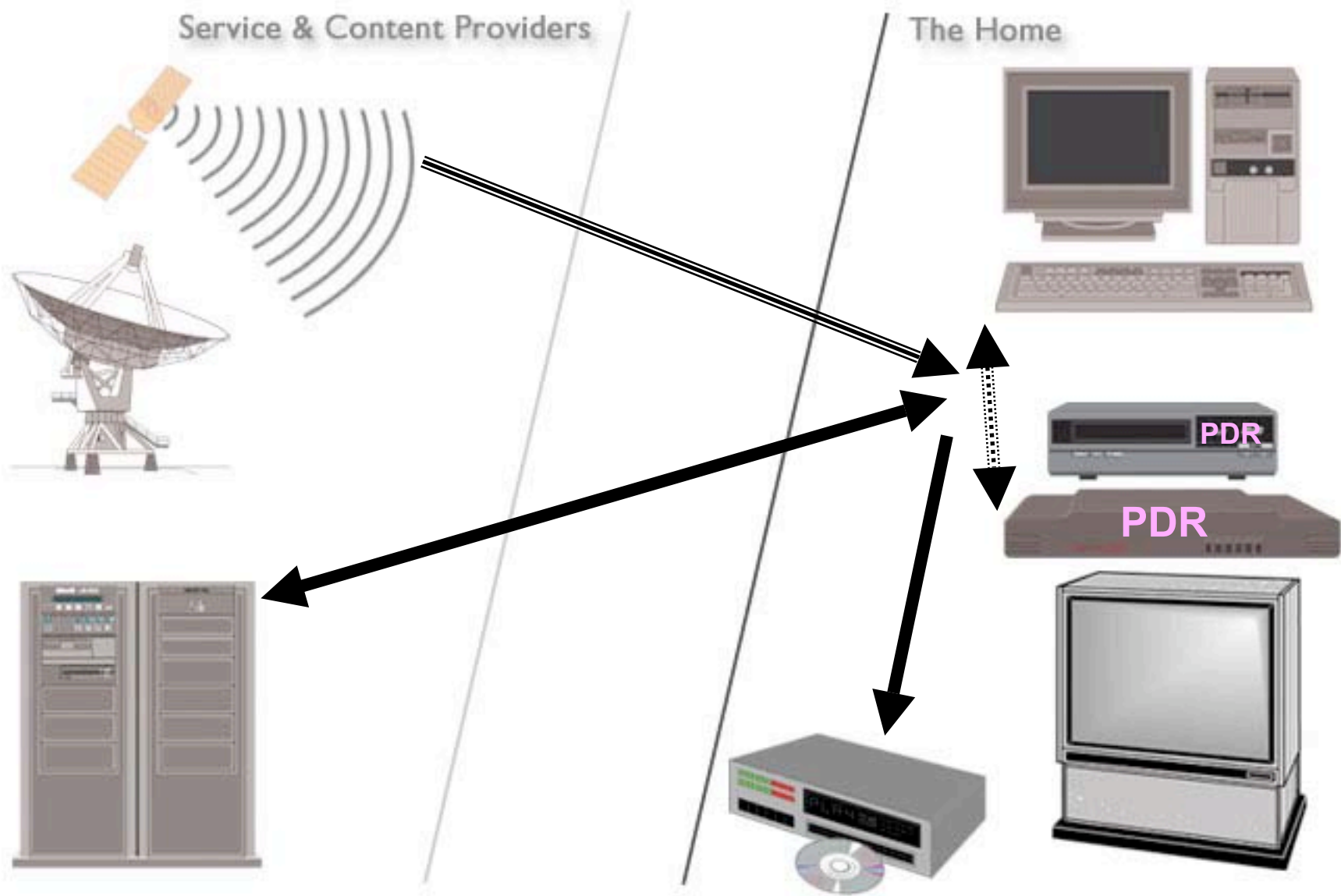


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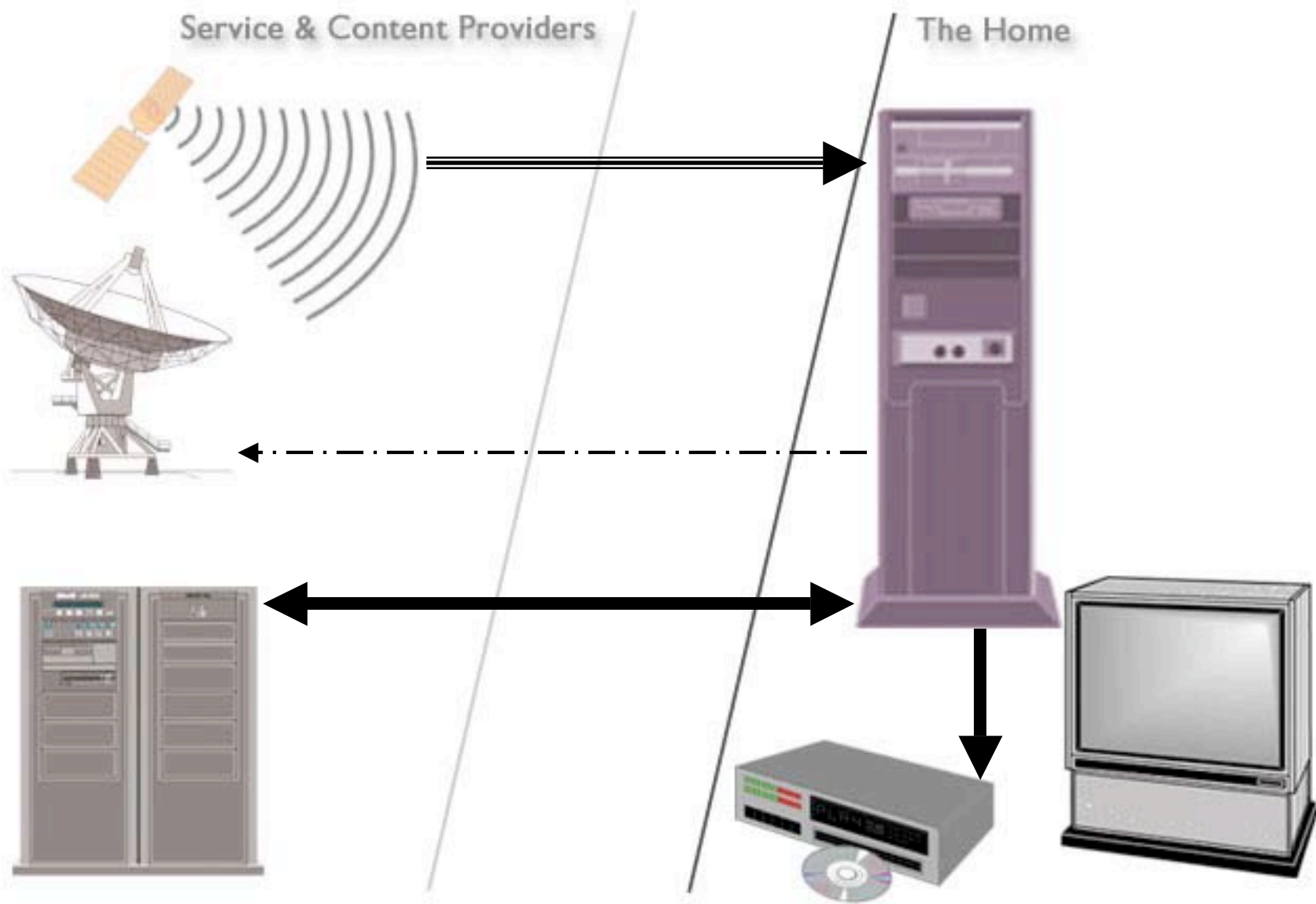
Post-Phase 1 applications (non exhaustive)

- Targeting - **Location or geographical based targeting**
- Targeting - Pre-load content
- **Time Dependent TCommerce** (non-extensive)
 - PPV/rental - VOD or audio
 - **PPP - Games**
 - Pay for ownership of eg: av content
 - Gambling/betting
 - Shopping. E.g.: downloaded av, html, **interactive catalogues**
 - Shopping. Real time linked to shopping channel or show or ???
 - Shopping. **Linked to targeted time-shifted advertising**
 - Shopping. Product placement
- **Interactive TV TV service support**
 - Multi stream
 - **Post-syncing audio & video**
 - Cross linking video streams (live & recorded)
 - Enhanced TV (data with video)
 - Interactive TV (programmes requiring return path)
 - **Alternative audio & video streams**
- Personalised content editing, indexing, integrated user created content

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Post-Phase 1 Benchmark System Features (a).

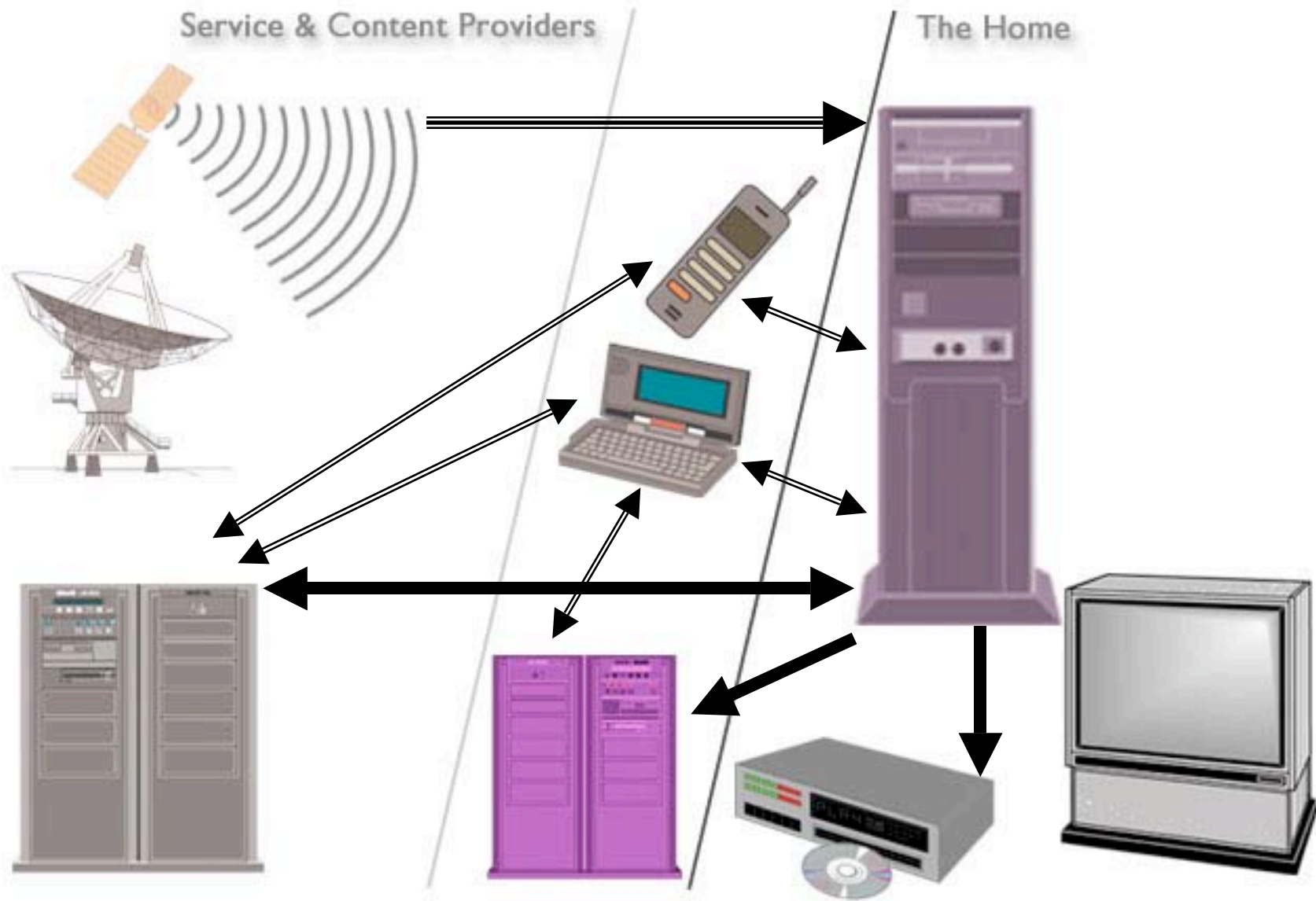
- **Super Distribution**. Sharing content between consumers - between personal area networks
- **Peripheral device** support - such as (a) printer (b) external expansion drives (c) supplementary display/s etc
- Inter-linkage between multiple **IP and TV** content
- **Mobile devices** PDA, mobile phone connectivity (PDR links and alerts to other devices)
- Community theatre/cinema distribution
- **Smart appliances** linkage to PDR in the homes (lighting, fridge, grocery)

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Post-Phase 1 Benchmark System Features (b)

- Portable recordable media - DVD-R or Cartridge or other
- Personal Networks (PN) 4 types. *Definition - Connection between two or more devices, within the consumer domain, that can share content.*
 - 1 **Single PN** contained within the home aka **Home Network**
 - 2 **Multiple personal (area) networks** contained within the home aka **Home Network**
 - 3 **Distributed** personal/family networks between multiple homes locally and globally
 - 4 PN that include the home and **external links** (e.g. mobile) to it
 - 5 PN completely outside the home using mobile storage devices - non-localised PN “**networks on the move**”

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Scenarios generated for Post-Phase 1 document

- Remote Storage Management by Multiple Service Providers
- Distributed pay per view storage using a 3rd party NDR
- Mobile Storage Devices/non-localised personal network
- Transferring content ownership over global personal networks
- Removable/recordable Media (DVD, cartridge, memory card/sticks)
- Remote global news highlights
- Re-Syncing New Audio/Closed Caption Info
- Printing Time-Sensitive Info from a PDR
- Audience Participation
- PPV for feature (action films) model
- Personalized News Segmentation
- Distributed pay per view storage using a 3rd party NDR
- Ad supported PPV for feature (action films) model
- Pay per view for feature film
- Promo Link / Trailer Selection

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14 'REAL' ADVERTISING OPPORTUNITIES

1 Targeted advertising

we now know who is out
individual

2 Non-skipping options

For additional fees advertisers can
force non-skip - regardless of

3 Ad free or ad free

1. Cl

14 Dynamic Insertion

Ads can 'drop' into relevant
content and viewers

4 "the ad loyalty card"

watch my ads we give you benefits
coupon

5. C

13 Story lines - repeat viewings

Created via stored 'soap operas'

12 Virtual ad channels

viewers choose to go to
relevant ad channels

2 Commercial exclusivity - on

2. F

Updating of commercials on the PDR
to retain timeliness

10 Infomercials

extending the short form ad.
Greater detail

9 Direct response

instant eCommerce gratification

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THE END

Contact

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*The **difficult** is done at once; the **impossible** takes a little longer*