



World Class Standards

# 20 Years of GSM

*A time before*

Madeira Is. 1987 – Cyprus 2007

Michael Clayton

GSM...younger than ever

Lemesos, Cyprus

15 – 16 March 2007

## Setting the timeline

Some things that happened in 1987

- ❑ **British Airways was privatised and listed on the London Stock Exchange.**

This is ironic since in the same year:

- ❑ **Black Monday-** The Black Monday decline was the second largest one-day percentage decline in stock market history (**45%**)

## Setting the timeline

Some things that happened in 1987



- Italian voters elect “film” star Cicciolina (Ilona Staller), 34, to the nation's Parliament .
- She served for five years.

### Setting the timeline

Some things that happened in 1987

- ❑ **The U.S. Senate votes 91 to 2 August 3 to confirm President Reagan's choice of economist Alan Greenspan, as chairman of the Federal Reserve Board.**
- ❑ **He served for 19 years.**



### Setting the timeline

Some things that happened in 1987

- ❑ **The biggest forest fire in recent Chinese history begins May 6 in Heilongjiang Province**
  - **It continued until June 2, devastating 2.5 million acres (700,000 hectares)**
- ❑ **Telephones become available on Japanese airliners; calls are relayed by satellite.**
- ❑ **The National Science Foundation creates a network that links university supercomputer centres, connecting regional networks of other academic and research sites in a new Internet – 1985**

## Setting the timeline

Madeira meeting 1987

□ **CEPT-CCH-GSM held a meeting in Madeira (16-20<sup>th</sup> Feb 1987)**

- **The future Pan European system would be based on TSs (Tins of Sardines).**
- **The system should be based on very long meetings.**
- **No decision on NBTDMA or WBTDM**
- **The meeting DID invented the concept of a “working assumption”**

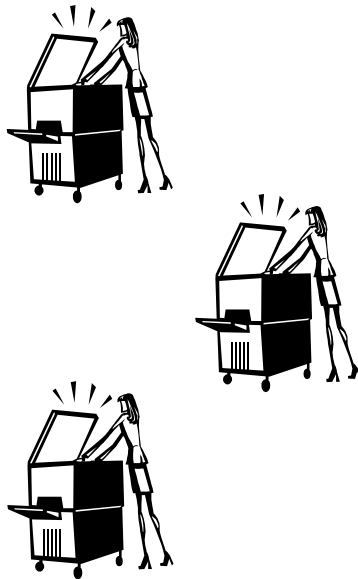
## Setting the timeline

Madeira meeting 1987

- The PN was asked to actually do something and so they started working on:
  - Man Machine Interface (02.30) even though manufacturers could do it better.
  - User Information and the spoken announcements (as long as it was English)
  - Start working on the 11 series
    - Contained testing which is still not finished.
    - This is probably because the core specs are not finished!
- Mr Simmons was accepted as a member of the PN.
- Document handling process was adopted

## Document Handling

- ❑ The documents were provided in written form.
  - There were typists at some meetings to make the changes
  - Most changes were hand written, however.
  - They were provided ON PAPER and were copied hundreds of times.





## Document Handling

- ❑ There were 49 documents at the Madeira meeting.
- ❑ There were 41 delegates.
- ❑ This equated to some 6,615 pages.
- ❑ In general there are about 89,879 pages in a typical tree.
- ❑ The Madeira meeting used about 7% of a typical Tree.
  - A few large branches.
- ❑ From GSM 13 until SMG 30, there have been some 8,026 documents at the plenary meetings.
- ❑ This equates to some 2,407,800 pages or 27 trees.
- ❑ But this is just for plenary!

## Document Handling

- ❑ **So why only count docs SMG 30, what happened?**
  - **Mr Holley and Mr Rodermund set up a LAN in SMG #29.**
  - **In SMG #30 November 1999 a LAN was set up. It was wired!**
  - **We did not go wireless until June 2002 TSG #16 in Marco Island.**
  - **It was a memorable meeting for me since I got married there!**
- ❑ **The National Science Foundation created a network that links university supercomputer in a new Internet – 1985**
- ❑ **14 years from birth of the WEB until electronic meetings and now it is polluting our specs.**

## Document Distribution

- Imagine you are a delegate at one of these earlier meetings.
- There are 302 documents (SMG #28) laid out on a table.
- You need a copy of each one.
- Some were 500 pages long (11.10).
- You have a new best friend.....
- The most sort-after thing at the meeting.

## Document Distribution

- ❑ An A4 photocopy paper box!!



## Document Handling

- And how were reports and some documents distributed outside the meeting?
- With one of these:



- A Fax machine.

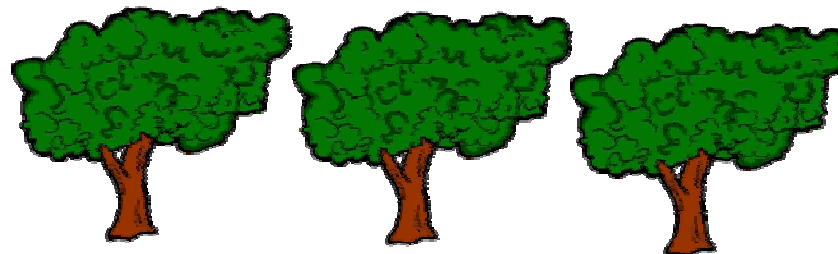
## Document Handling

- PT12, the support group to SMG used to send 30 page faxes to some 120 people.
- It took time.
- It was done over night or better still over the weekend.
- One Monday we came in to ETSI to an irate and sleep depraved senior manager in ETSI secretariat.
- We had inadvertently sent the same fax some 100 times to the.....
- Fire department ....Ooops!



## Change Requests

- In June of 1988 (GSM #19) there was a comment in the report that a large number of documents were being distributed.
- In August 1988 276,100 pages were sent out by the Permanent Nucleus (Doc 005/89) by snail mail.
- This is about three trees.



- Only a few pages were being changed and it was suggested that only the changed pages were sent.
- The Change Request was born at GSM #19 (161/88)

## Change Requests

- Essential for functioning** – If not implemented the network will not function. Consequently, a CR in this category is mandatory and must be dealt with by GSM as soon as possible.
- Desirable** – This category relates to changes which would be nice to have, but they are not essential for the system.
- Additional Feature** – This category relates to additional features, functions, services....
- Editorial or formal point** – This category relates to changes such as the correction of references or typing errors, improved documentation or reformatting of the presentation.



## CRs

CHANGE REQUEST n° 02.17-1  
Recommendation GSM 02.17  
Reference version: 3.0.1  
Source: WP1  
Date: 17 February 1989

Subject: PIN required/not required indicator

Category: A- "essential"  
B- "desirable, not MS-upward compatible"  
C- "desirable, MS-upward compatible"  
D- "editorial/alignment"

<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input checked="" type="checkbox"/>

Reason for change:

The "PIN enabled/disabled indicator" makes the "PIN required/not required indicator" superfluous. The SIM can be made more universal thus reducing different stages of handling and programming.

Details of changes:

1. Section 3.4.1, on page 8, item 17 and on page 9, item 6:  
The "PIN required/not required indicator" is proposed to be deleted.
2. Section 3.4.1, page 9, new items 6, 7, 8 and 9:  
The comments between the brackets are not needed since the "PIN enable/disable indicator" will indicate the use of the PIN.

See modified pages 8 and 9 in the attached proposed version 3.1.0.

The following pages (marked up with proposed amendments) are annexed:

Proposed version 3.1.0 of the recommendation.

Impact on other recommendations:

GSM 11.11 needs to be amended accordingly.

Other comments:

## Change Requests

- ❑ And there were some memorable CRs.
- ❑ GSM 11.10 the test spec was hundreds of pages long.
- ❑ The CRs to this were **big**.
- ❑ But one in particular was bewildering.
- ❑ There were change bars in the margins, but no changed text.
- ❑ The PN support explained....

“Mr Chairman, this CR deletes all the hidden text in the document”

## Terminology

- Over the years, the key for standards has always been consistent terminology.
- For some time GSM and SMG subscribed to the “PNE rule”.
- The words had specific meaning such as:

# Terminology

### Shall:

**Shall shall mean will. If shall means will, it does not mean may but will, which means that it must. If the will of GSM is to use will, it shall mean may, rather than meaning shall or will.**

### Should:

**Should does not mean should, but shall mean may, as opposed to shall which means will not may. May is different from shall because it is a month.**

## Terminology

### Rejected:

When applied to GSM it does not mean rejected but postponed .

### Postponed:

This means postponed unless it means implicitly accepted, but for some time in the future.

Where the latter happens it need not be discussed in case it gets rejected. If something is conditionally postponed it means that GSM doesn't really understand it (see rejected) .

### Deleted:

When GSM deletes a service this means that it is deleted. Well, unless the STC can solve it later when it is resurrected or undeleted

## Terminology

### “I agree with all you have said”

This means that I haven't listened to what you have said.

### “I hear what you say”

means that I did listen to what you said but what you said isn't what I meant, so I shall ignore it anyway and repeat what I said.

### “My comment was the same as Mr/Mrs .....”

This means that what I was about to say, was so stupid that I refuse to tell you what it was. Alternatively, I have forgotten what I wanted to say and I am too scared to admit it.

## Terminology

“This is exactly what I said xx minutes ago”

It has been so long ago that I last spoke, that no one can remember what I did say, least of all me, so I will take the credit for the solution.

“I have some sympathy with what you say”

I don't care what you say, but I have listened so that I can ignore it. Refer to “I hear what you say”.

“Do we have agreement?”

Who cares? It's coffee/lunch/beer time.

## Terminology

*It Shall be possible to:*

This has multiple meanings:

**SA1:** We really, really want this service/feature to be available in case we decide we can do something useful with it.

**SA2:** SA1 really, really wants this one but we can't do it. Let's confuse the issue and misinterpret it. They probably won't find anything useful to use it for anyway.

**SA3:** This is a typo. It should be it shall NOT be possible; not at all. But if you really must then you can but we will have to shoot you afterwards.

**SA4:** Is that what you really said or is it an error in the codec?

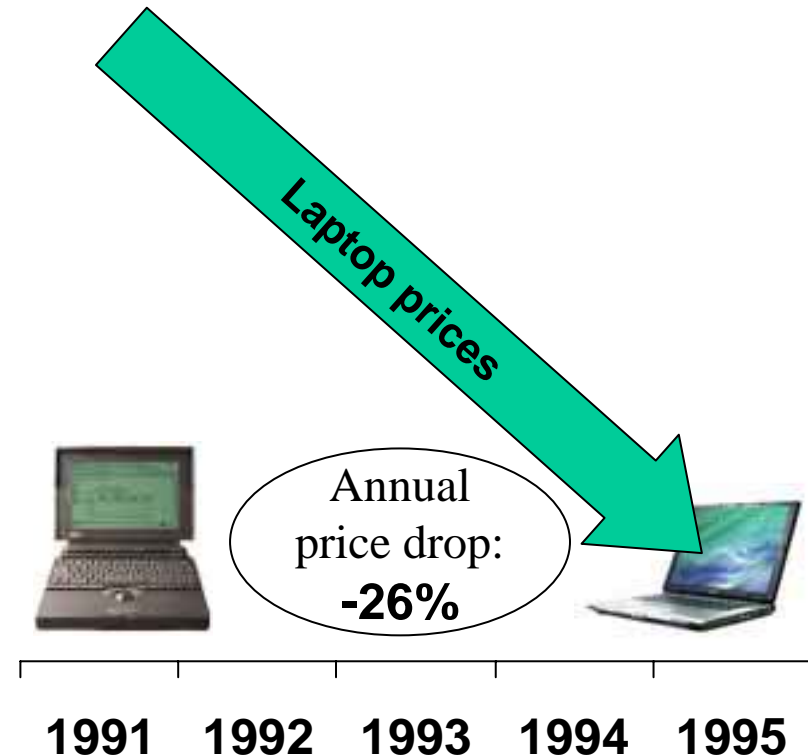
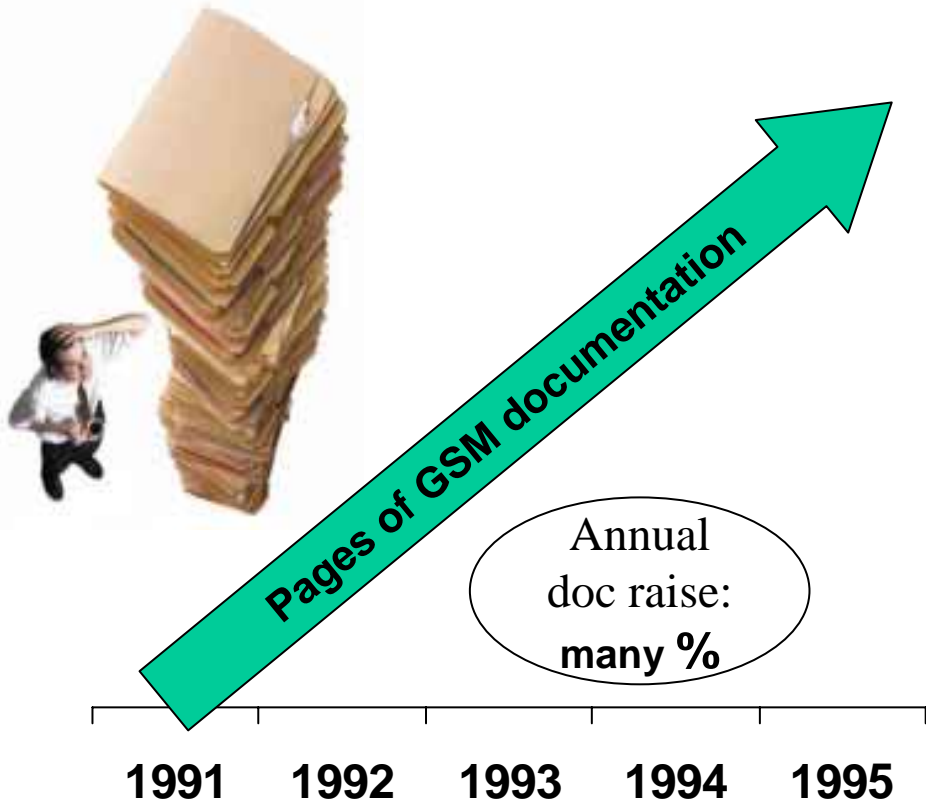
**SA5:** Anything's possible...you decide.



## Increasing complexity reached a tipping point

...when the number of papers soon exceeded the number of brain-cells required

Luckily, other market trends came to the rescue and provided extra memory





## E-mail proved to be much more efficient, or... ?

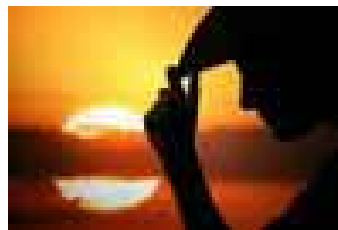
The screenshot shows the Microsoft Outlook interface. The 'Folder List' on the left shows the 'Inbox' folder with 1632 items. The main pane displays a list of emails in the inbox. A modal error dialog box is overlaid on the list, stating 'Your mailbox is over its size limit' with an 'OK' button. The status bar at the bottom indicates '1632 Items' and 'All folders are up to date. Connected'.

From	Subject	Received	Size
ETSI_RAN_RFC_list	Re: Re: Draft Agenda for RAN...	on 2007-03-14 09:54	381 KB
ETSI_RAN_RFC_list	Re: Draft Agenda for RAN #17	on 2007-03-14 09:28	512 KB
ETSI_RAN_RFC_list	Re: Draft Agenda for RAN #17	on 2007-03-13 22:42	14 KB
CEPT_WP_list		on 2007-03-13 22:11	382 KB
<undisclosed>		on 2007-03-13 18:18	5 KB
<undisclosed>		on 2007-03-13 17:36	686 KB
CEPT_RAN_RFC		on 2007-03-13 16:56	388 KB
CEPT_RAN_RFC		on 2007-03-13 12:59	157 KB
CEPT_WP_list	Re: Fw: Re: Comments on appen...	on 2007-03-12 17:59	12 KB
ETSI_RAN_RFC_list	Re: Draft Agenda for RAN #17	on 2007-03-07 16:15	506 KB
ETSI_RAN_RFC_list	Re: Draft Agenda for RAN #17	on 2007-03-05 09:21	13 KB
<undisclosed send...	FW: Coordination frequency alloc...	on 2007-03-04 17:11	26 KB
ETSI_RAN_RFC_list	Draft Agenda for RAN #17	on 2007-02-19 16:20	33 KB
ETSI_WP_list	Re: Fw: Re: Comments on appen...	on 2007-02-18 13:30	23 KB
<undisclosed send...	FW: Coordination frequency alloc...	on 2007-02-18 13:24	19 KB

## **Tonight**

**A great deal of work has been done in the last 20 years.  
It is largely up to many of the people here tonight.**

**I salute you!**



# Thank you

**Enjoy the rest of the evening,  
and indeed the next 20 years!**

**(Sorry from Jonas for not being with us)**