



# Election Technologies

Global long term perspectives and  
trends

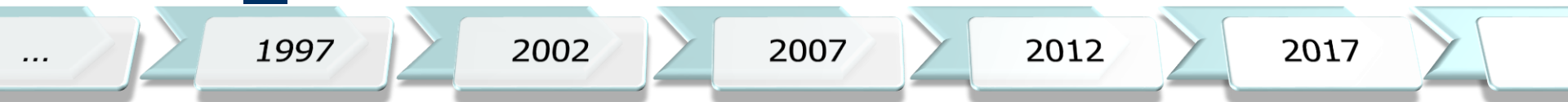
Peter Wolf

International IDEA

IDEA/IOF/NE/RECEF Workshop on the use of New Voting Technologies

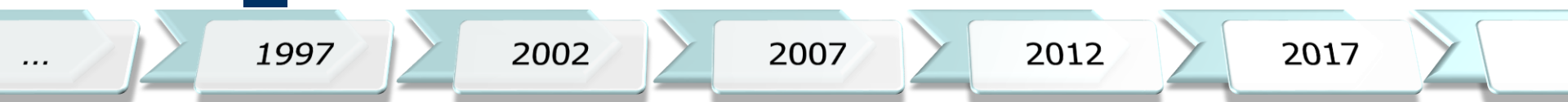
Praia, 22 November 2017

# 20+ years of “new” voting technology

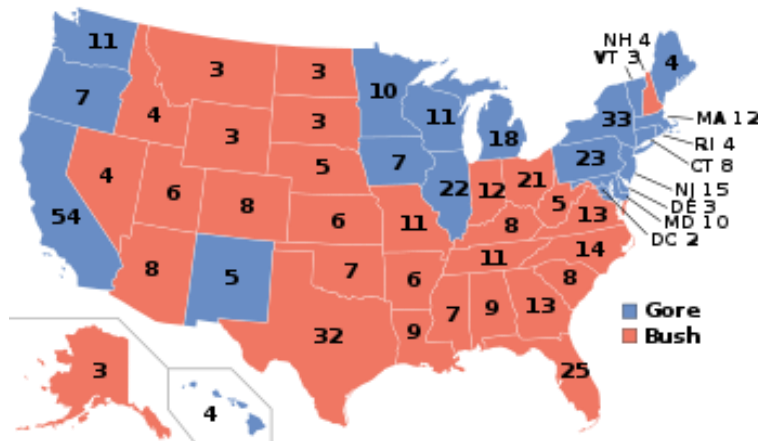




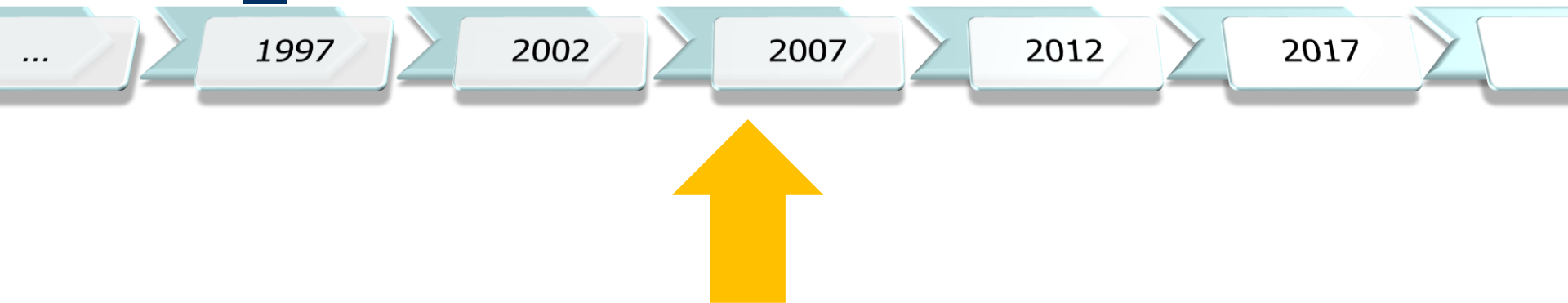
# Voting Machine Pioneers 1980s-1990s



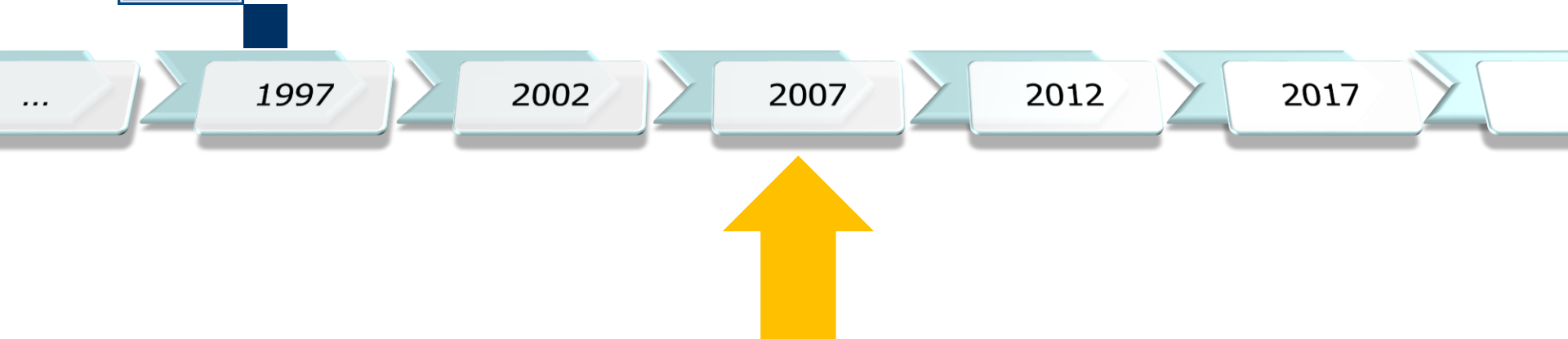
# VM investment boom after US 2000



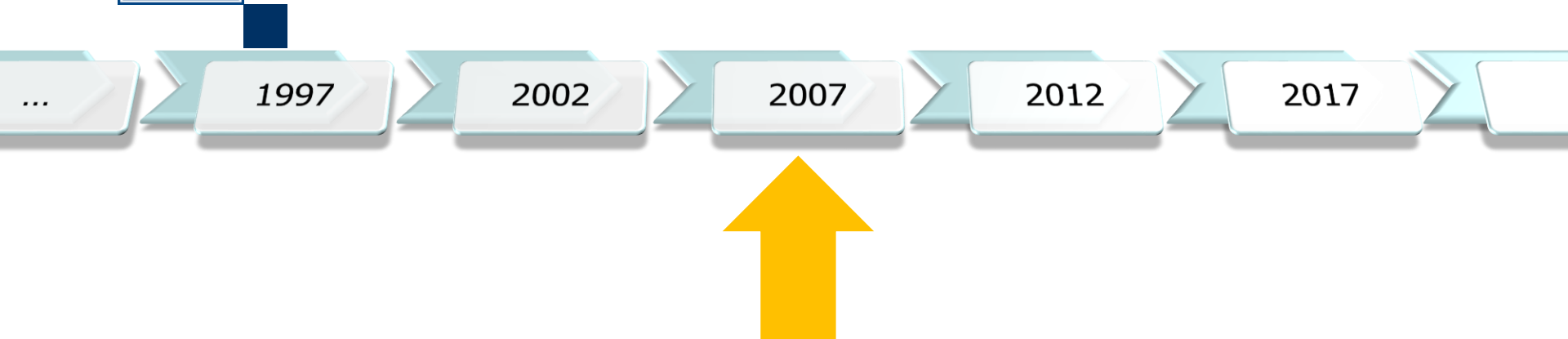
# Internet voting Estonia 2005



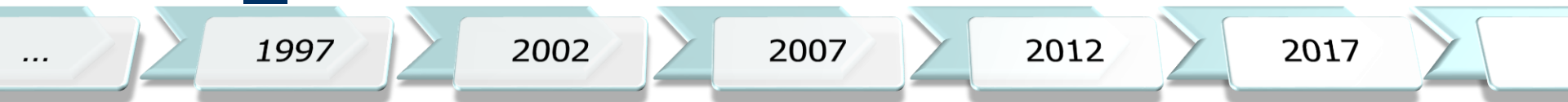
# The future is e-voting!



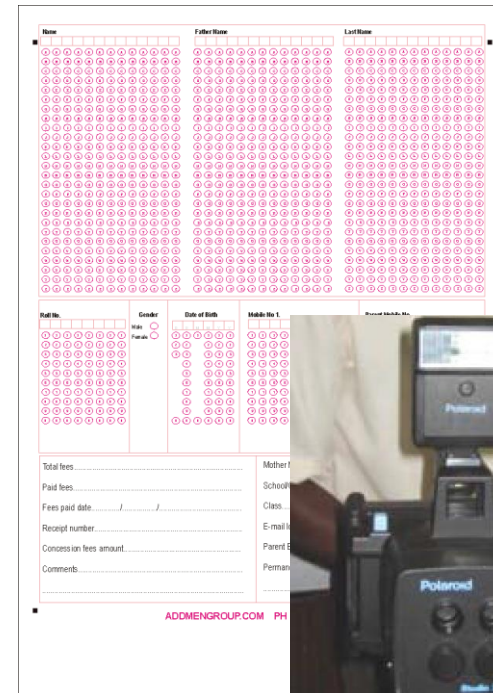
# The future is e-voting?



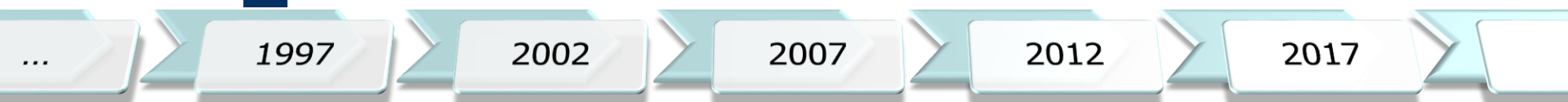
# More critical view on e-voting



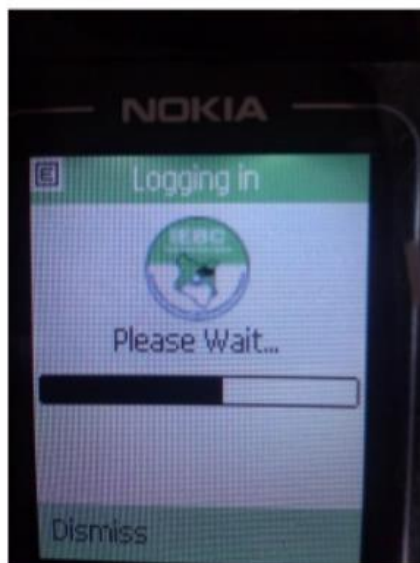
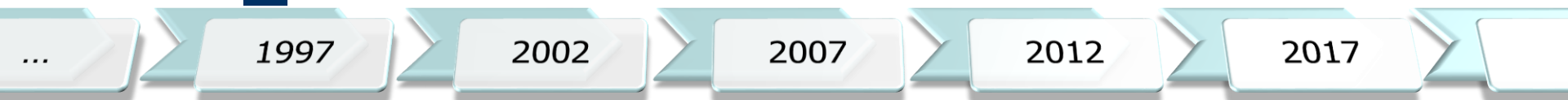




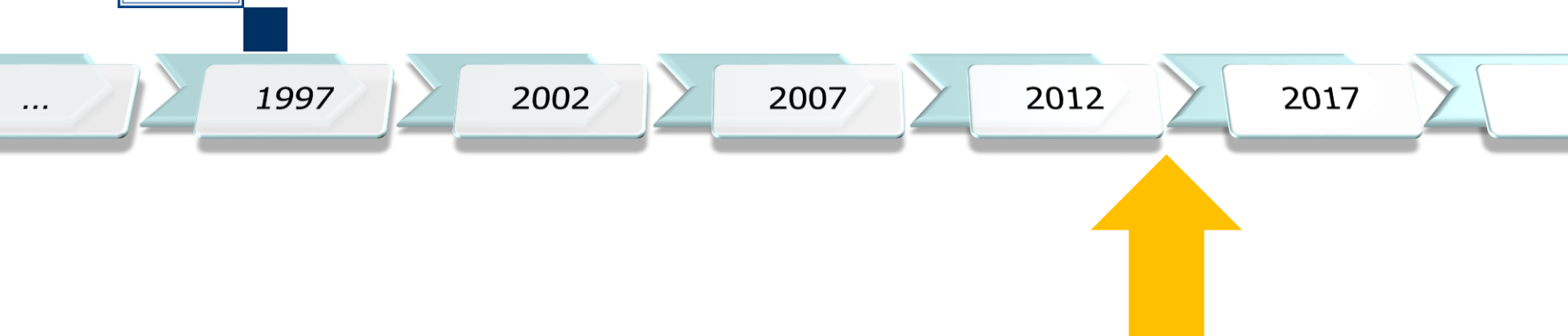
... to biometric VR field kits.



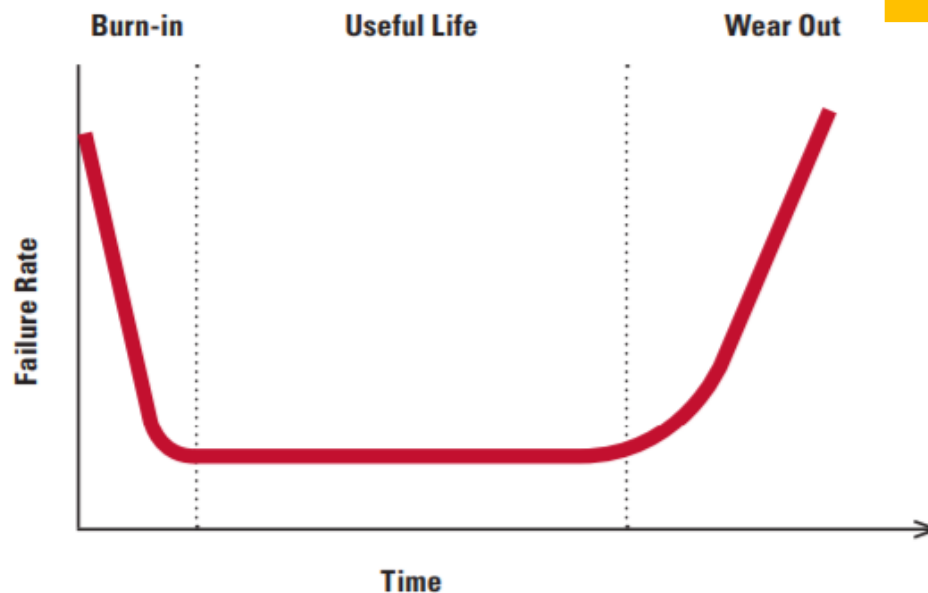
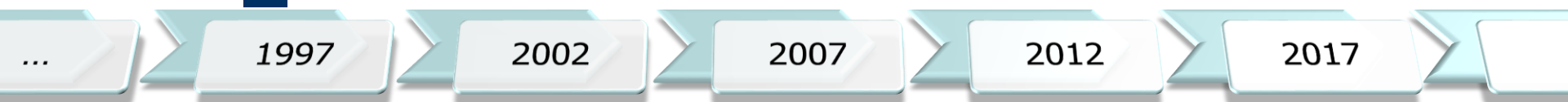
# Electronic Tally and Transmission



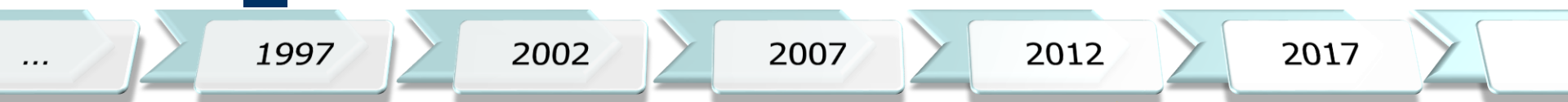
# Biometric Voter Identification



# Some challenges: Technology failures?



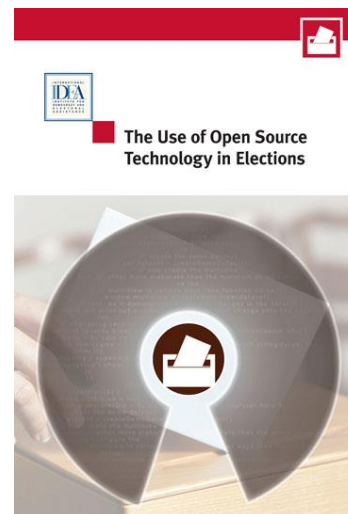
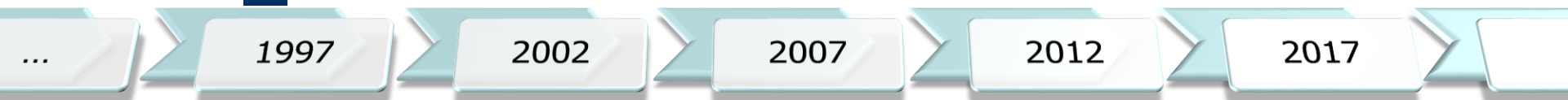
# Some challenges: Election and technology cycles?



Election year	1992	1996	2000	2004	2008	2012
Operating System						
Data Transfer						
Mobile Computers						
Biometrics Standard	1-1986	1-1993	1a-1997	1-2000	1-2007	1-2011



# Cost & sustainability – The need for synergies





# Another focus since 2016

## Reality, Perception, Counter-Measures

...

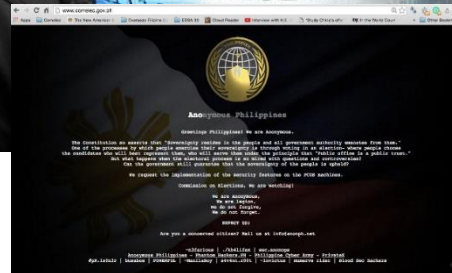
1997

2002

2007

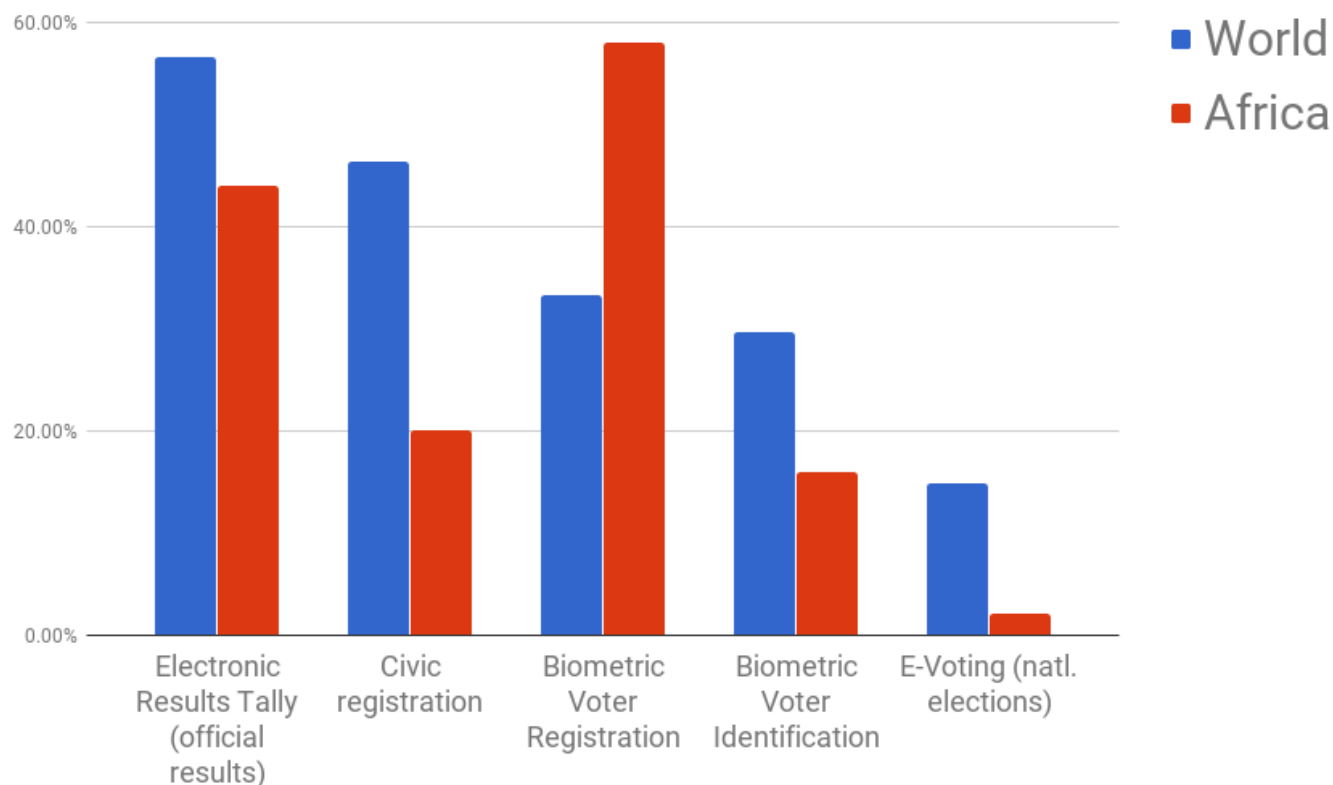
2012

2017





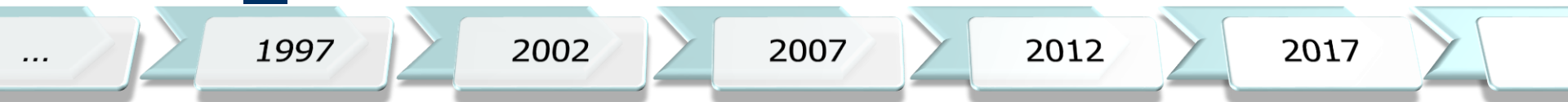
# Where is are we in 2017?



Source: IDEA ICT in Elections Database: <https://www.idea.int/data-tools/data/icts-elections>



# Beyond the stats: Taking stock



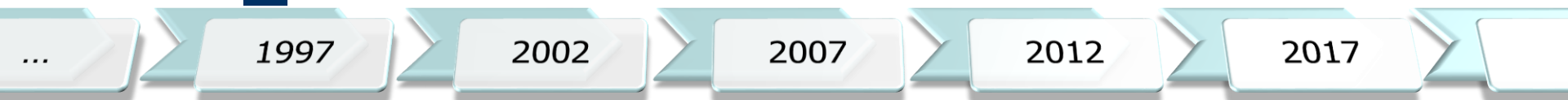
What were the successes and achievements?

What are remaining and new challenges?

What solutions have been found?

What is the future?

# Beyond the stats: Taking stock



What were the successes and achievements?

What are remaining and new challenges?

What solutions have been found?

What is the future?



**Open Data in  
Electoral Administration**





Thank You!