AUSTRALIAN OFFSHORE

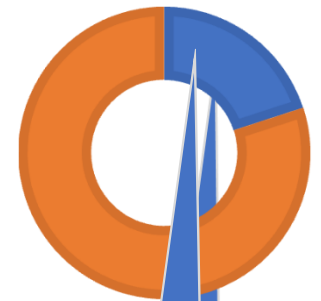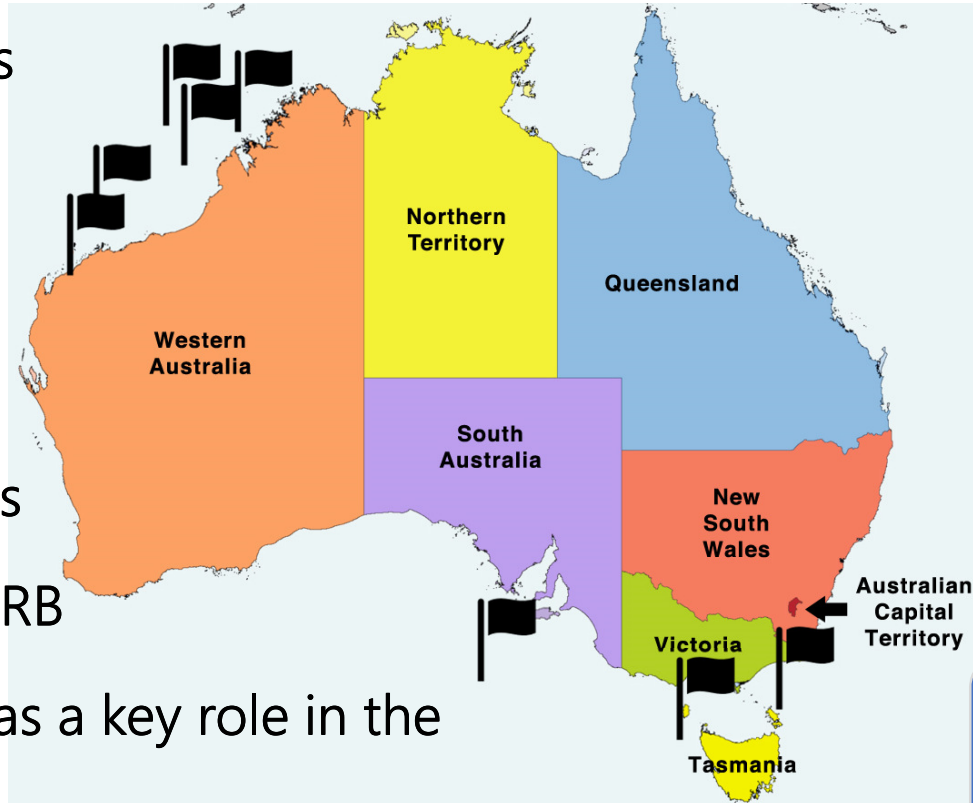# Data Management Initiatives 2019-2020

Presentation for NDR Utrecht
Tuesday 15th October 2019

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NDR 2019 – Offshore Australia

- Offshore titles and types
- Titleholders
- Gas volumes & impacts
- Oil Volumes & impacts
- Activity levels and trends
- NOPTA, NOPSEMA & ORB
- Recognition that data has a key role in the industry

an 'open' information regime – data should be shared

Northern Territory

Queensland

Western Australia

South Australia

New South Wales

Australian Capital Territory

Victoria

Tasmania

20% of NOPTAs budget - around $3 million

16% of NOPTA's staff – 9 persons

What characterises petroleum data management in Australia?

It is an industry - acquirers, providers, value-adders, vendors, resellers

- Low cost environment has changed the data focus
- Interest in data – 'big data', machine learning & AI
- Changing technologies and types – need to respond
- Improving access to quality data v's protecting commercial interest – can we do both?
- Keeping the balance between prescriptive & objective
- Inconsistent interpretation and expectations between jurisdictions
- Present regulatory framework is not ideal!

increasing expectations - timeliness, accessibility & interoperability

Data Team Achievements & Challenges

Since 2012 we have:

★ Defined NOPTA's role in confidential & open-file data

★ Gained acceptance that 'good' DM is a priority for all

★ Established a national repository (NOPDCR) with GA & DMIRS

★ Reinforced submission & compliance expectations

★ Built a competent team & gained industry credibility

★ Consolidated & integrated collections from each state into a Commonwealth collection

★ Eliminated backlogs from years of 'neglect'

★ Made more data available than ever before & made it easier to obtain

★ Moved to a more pro-active mode – sheer luxury!

incremental progress has been the key to our success

Regulatory Development Issues – what's wrong?

NOPTA does not make the regulations but we can influence ......

- Current regulations are out-of-date, inflexible & don't support **any of the** stakeholder objectives – including ours!
- Are all reported items still relevant?
- How do we manage new techniques & technologies?
- Why can the TA vary some requirements but not others?
- What are the appropriate periods of confidentiality?
- Is permanent confidentiality still valid for certain data?
- For how long should data & samples be retained?
- How can we develop meaningful guidelines and advisories?
- Can we reduce confusion & ambiguity?

We have a process for change ......
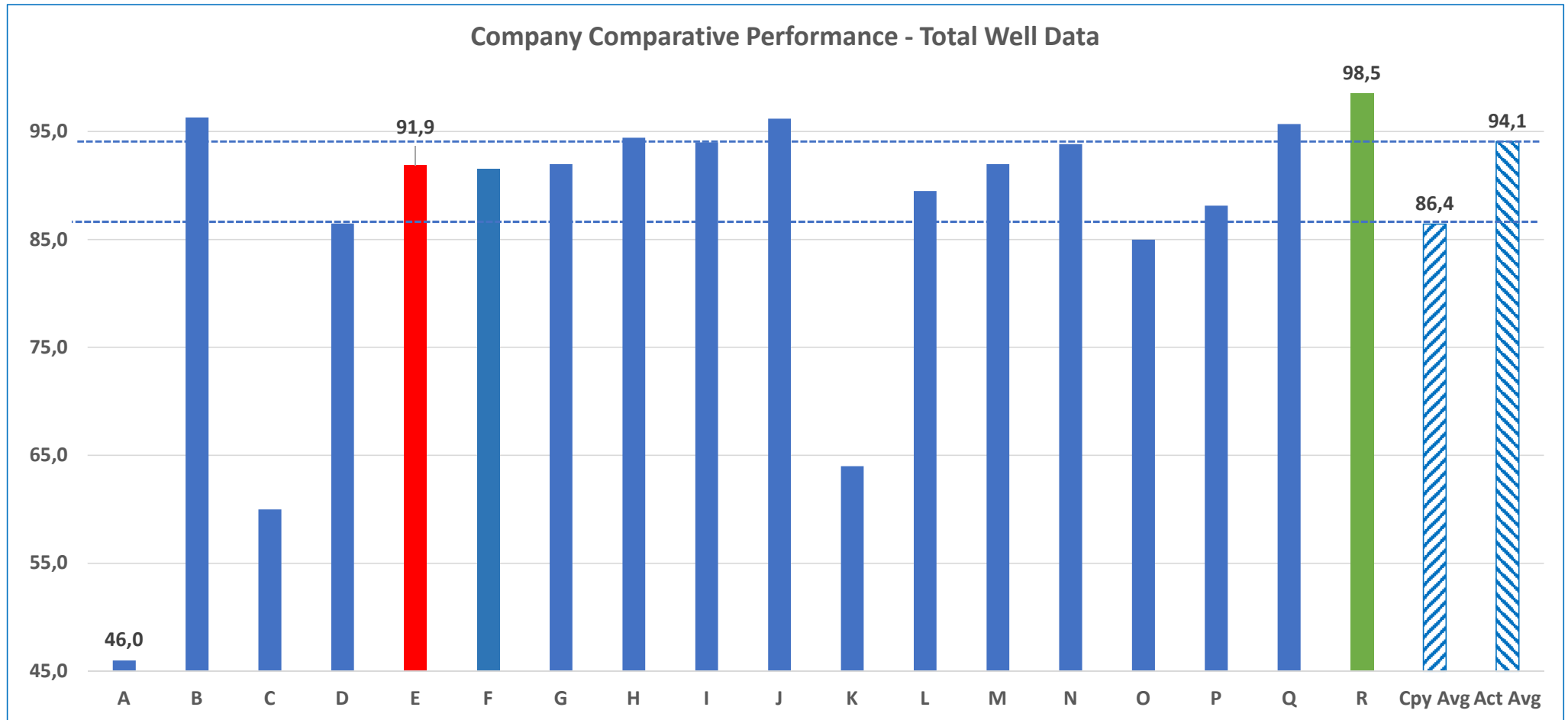
Data Compliance Benchmarking – why do it?/How to do it

Everybody wins!

What can we benchmark?

How do we do it?

NOPTA Data Management - Activity Benchmarking Template									
Category	**Timeliness**								
Initial submission 'package' by regulated submission date	on time	< 2 weeks	< 4 weeks	< 6 weeks	< 8 weeks	< 12 weeks	< 16 weeks	> 16 weeks	Variation adjustment Y/N
Level of submission timeliness	100%	90%	80%	60%	40%	20%	10%	0%	Y
NOPIMS report or shared drive upload date	Note - credit of one category applied where proactive submission variation is granted prior to due date, if time is extended (still judged on time of submission but adjusted for 'engagement').								
15% of final combined score - actual mark	15	14	12	9	6	3	2	0	
Category	**Completeness**								
All required items provided within submission at regulated date	complete	missing 1	missing 2	missing 3	missing 4	missing 5	missing 6	missing > 6	Variation adjustment
Level of completeness of submission 'package'	100%	90%	80%	70%	60%	50%	20%	0%	Y/N
Regulatory checks - items missing	Note - credit of one category applied where proactive submission variation is granted prior to due date, if contents are varied (still judged on contents but adjusted for 'engagement').								
30% of final combined score - actual mark	30	27	24	21	18	15	6	0	
Category	**Usability**								
Fitness for purpose at time of data release	All items verified	1 item unverified	2 items unverified	3 items unverified	4 items unverified	5 items unverified	6 items unverified	> 6 items unverified	Variation adjustment
Level of usability and validity of data items	100%	90%	80%	70%	60%	50%	20%	0%	Y/N
File compliance checks	Note - where an issue is proactively identifed by the submitter (and it leads to improvement in the data available), credit of one category is applied (still judged on fitness but adjusted for 'engagement').								
40% of final combined score - actual mark	40	36	32	28	24	20	8	0	
Category	**Responsiveness**								
Rework and iterations required to ensure fitness	No compliance activity required	1 compliance contact required	2 compliance contacts required	3 compliance contacts required	4 compliance contacts required	5 compliance contacts required	6 compliance contacts required	> 6 compliance contacts required	Feedback after release
Measure of responsiveness and need to resubmit	100%	90%	80%	70%	60%	50%	20%	0%	Number and issue(s)
SharePoint, emails to/from data@nopta, resubmissions received	Note - important not to double-count compliance contacts. Multiple issues resulting in a single resubmission count as one contact/resubmission. Where there is no response, multiple attempts to contact count as multiples.								
15% of final combined score - actual mark	15	14	13	12	9	8	3	0	
Total = Timely + Complete + Fit + Response e.g.	67								
Issues identifed after release									
Titleholder									
Activity Name									
Activity Type			Region/Basin			Checked By			
Title			Date Due			Date Checked			

Data Compliance Benchmarking – peeling the onion (1)

Company Comparative Performance - Total Well Data
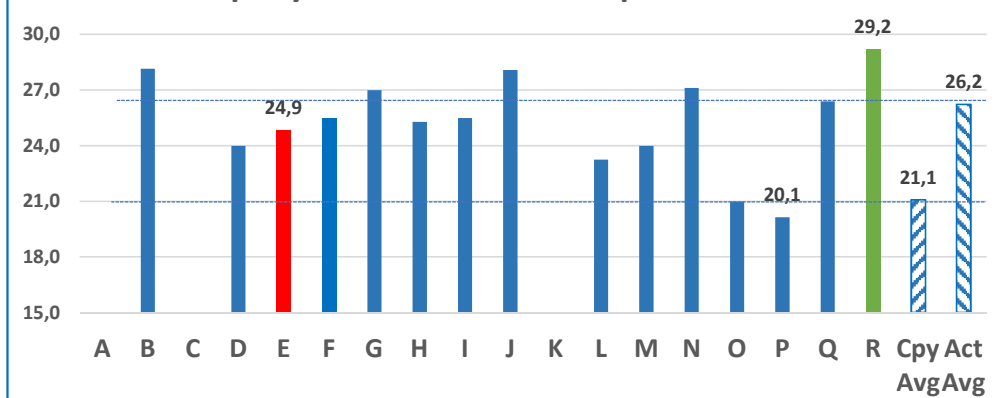
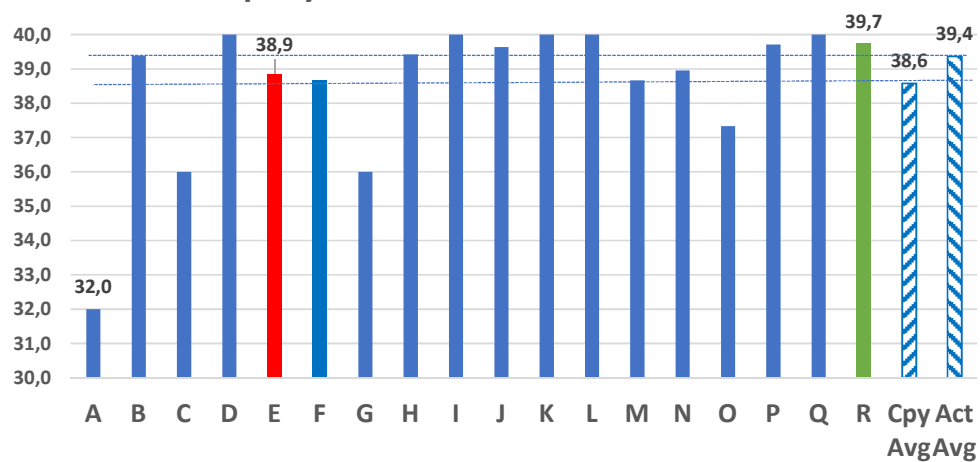# Data Compliance Benchmarking – Peeling the onion (2)

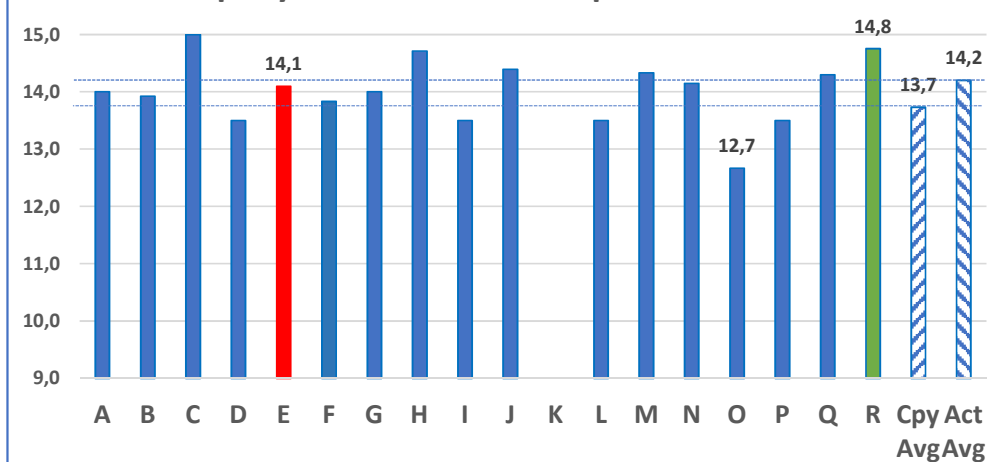**Company Performance – Timely Well Data**
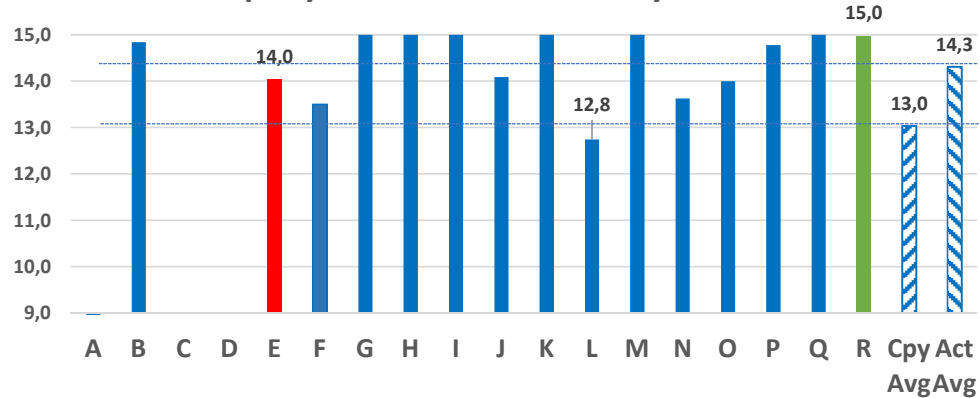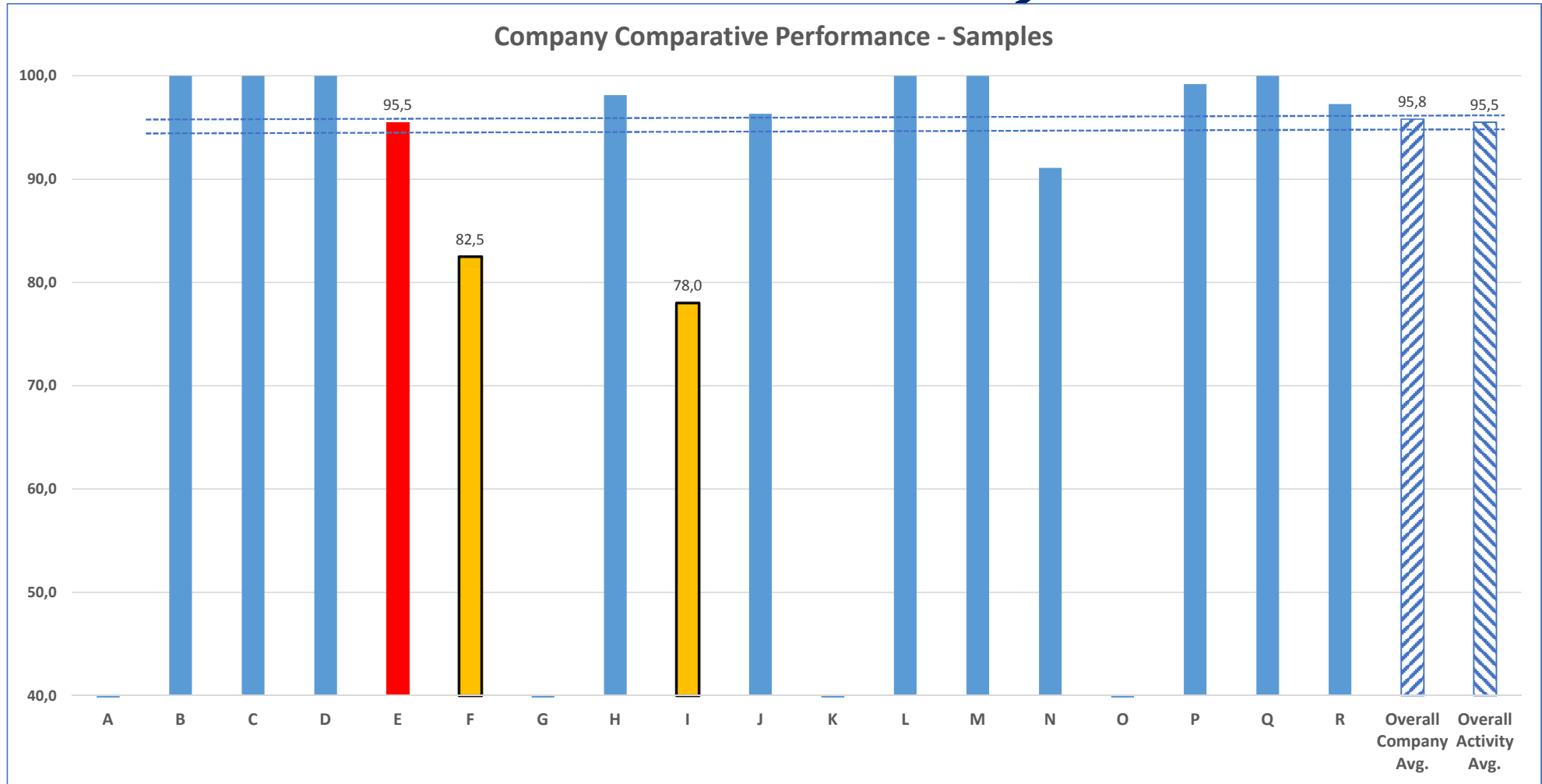
Company Performance – Complete Well Data

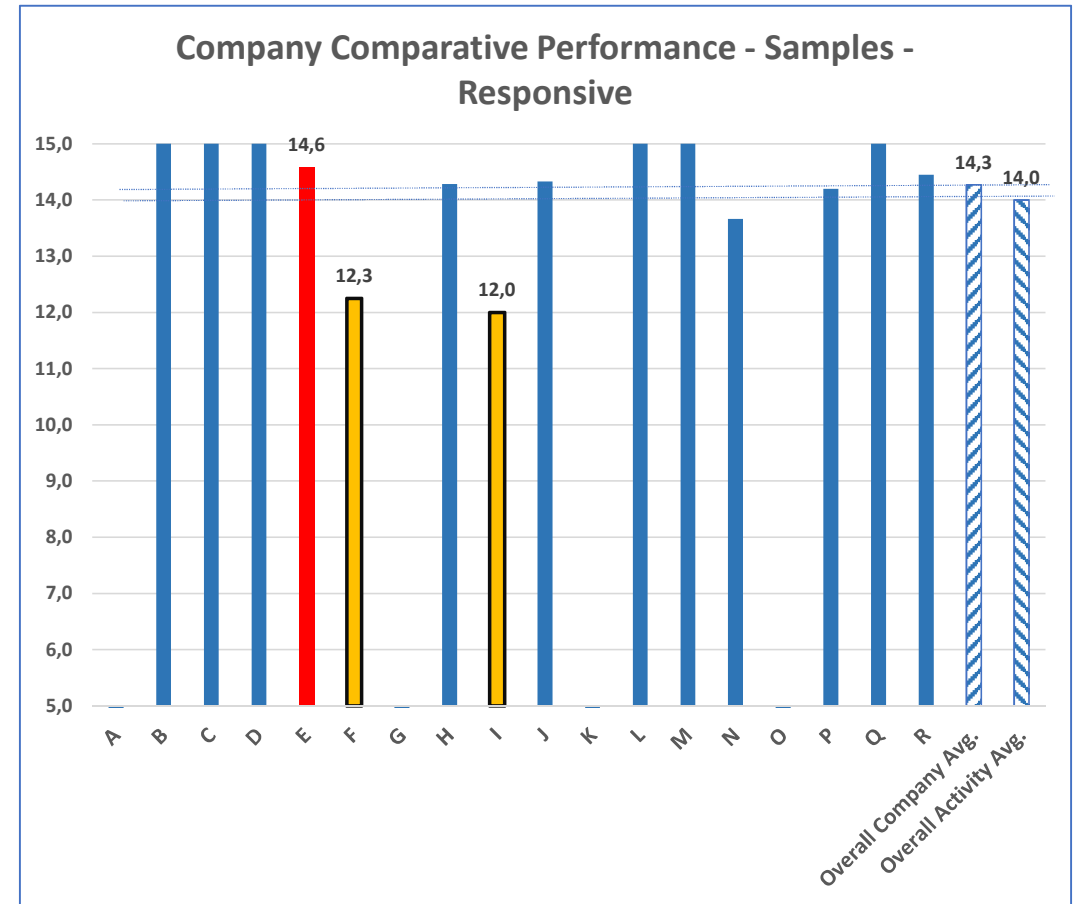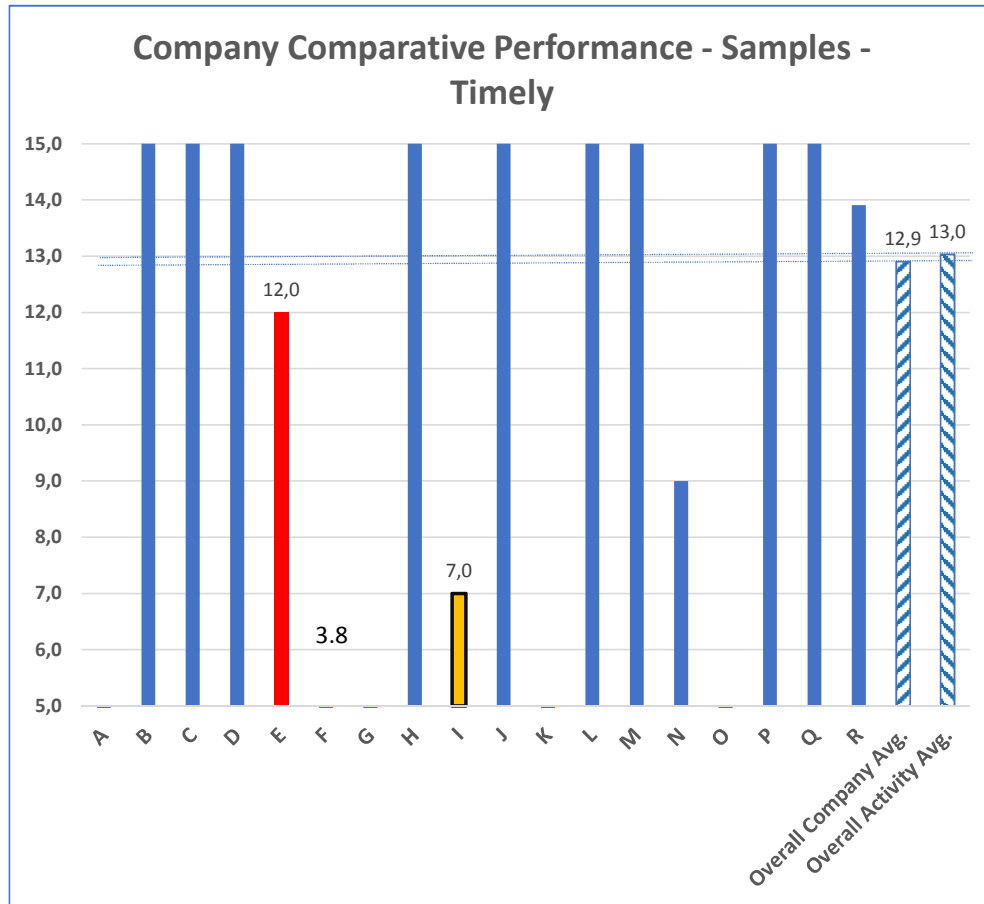**Company Performance – Usable Well Data**
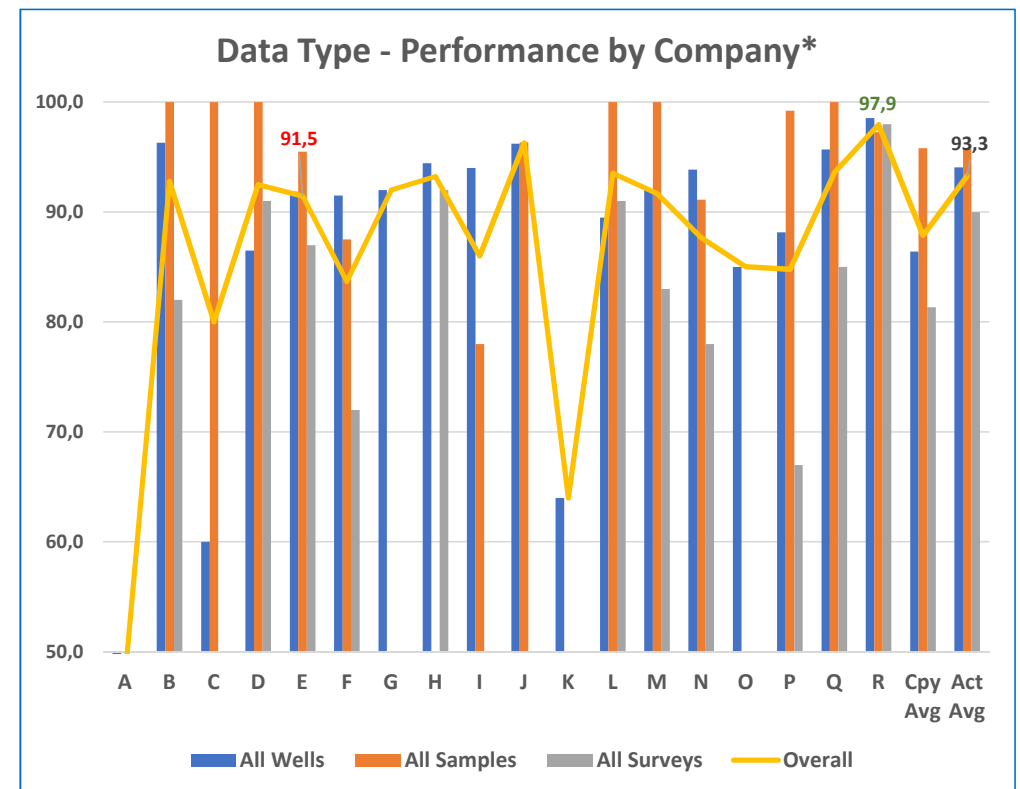
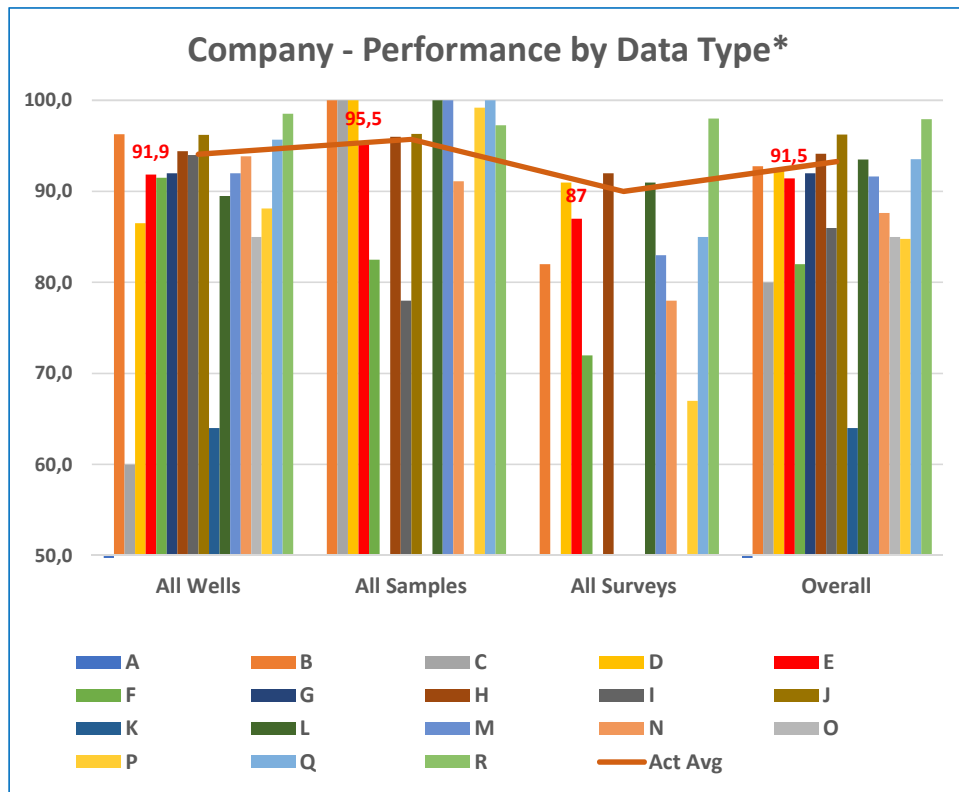**Company Performance – Responsive Well Data**

Data Compliance Benchmarking – Peeling the onion (3)

Company Comparative Performance - Samples

Data Compliance Benchmarking – Peeling the onion (4)

Company Comparative Performance - Samples - Timely

Values visible: E = 12,0 (red); F = 3.8; I = 7,0 (yellow); N = 9,0; R = 13,9; Overall Company Avg. = 12,9; Overall Activity Avg. = 13,0

Company Comparative Performance - Samples - Responsive

Values visible: E = 14,6 (red); F = 12,3 (yellow); I = 12,0 (yellow); Overall Company Avg. = 14,3; Overall Activity Avg. = 14,0

Data Compliance Benchmarking – lessons for companies (1)
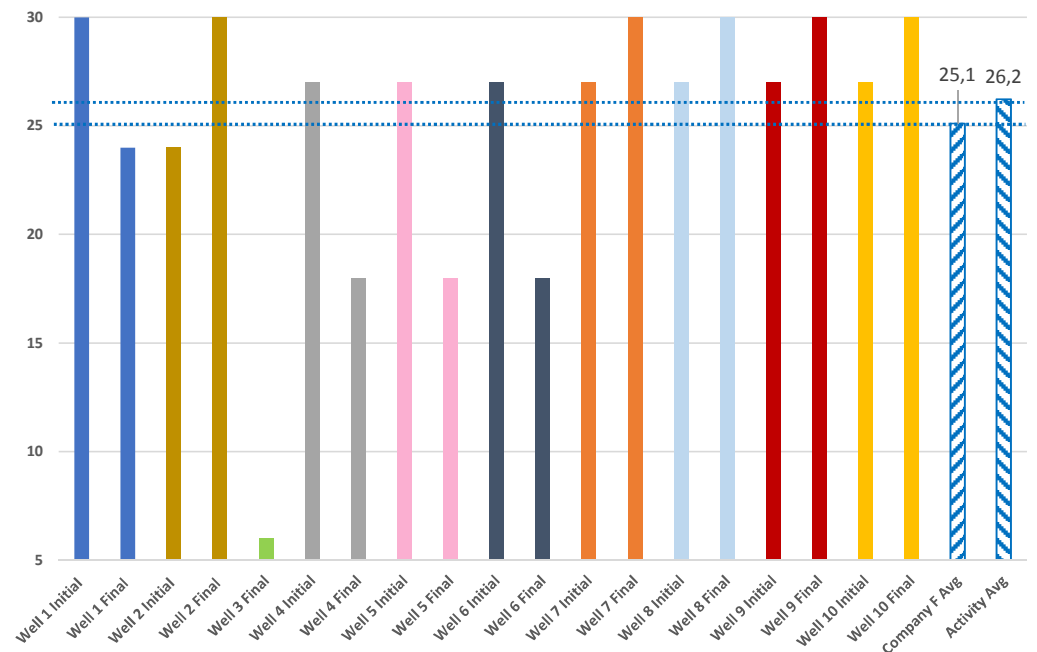
Data Compliance Benchmarking – lessons for companies (2)

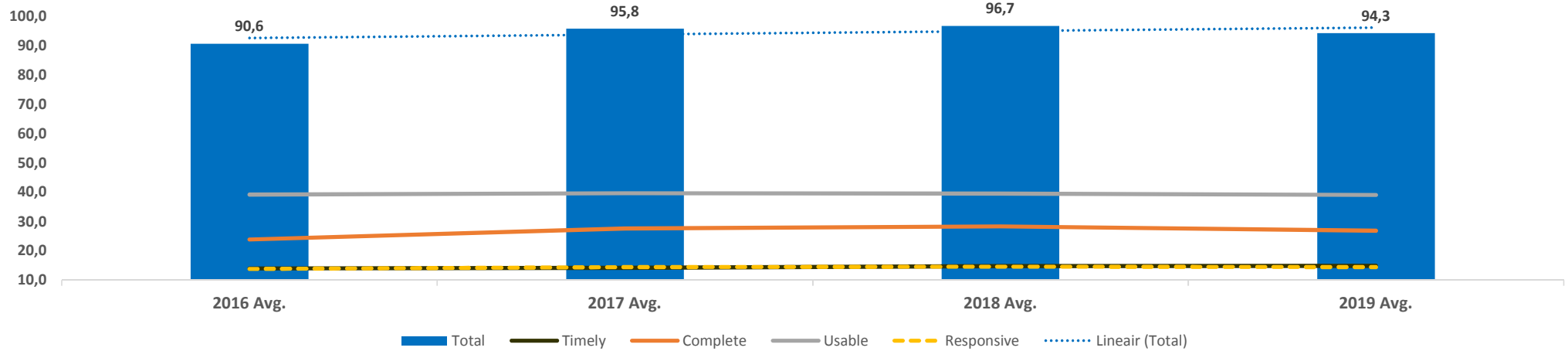
Company E Well Data - Performance by Activity - Totals
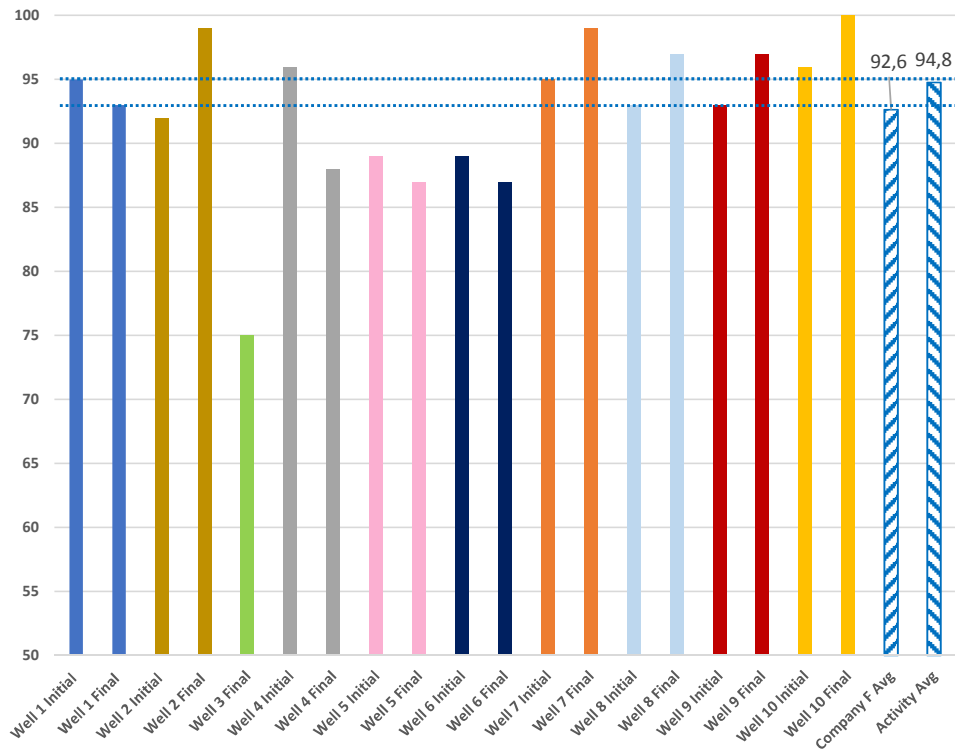
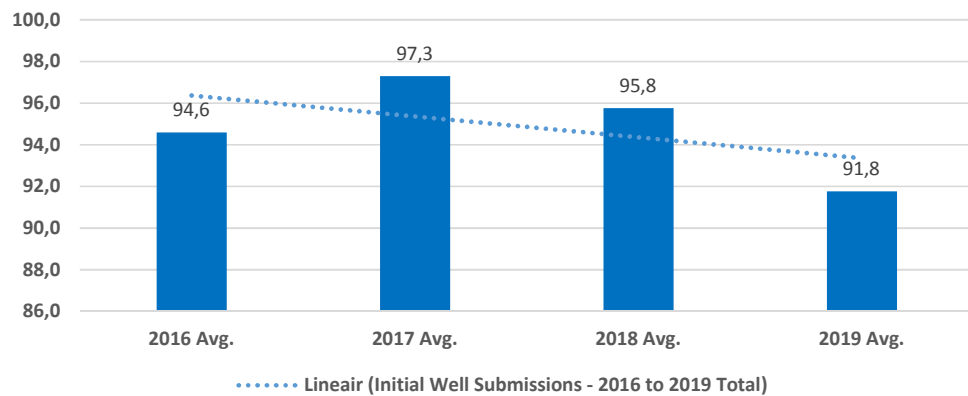Company E Well Data - Performance by Activity - Completeness

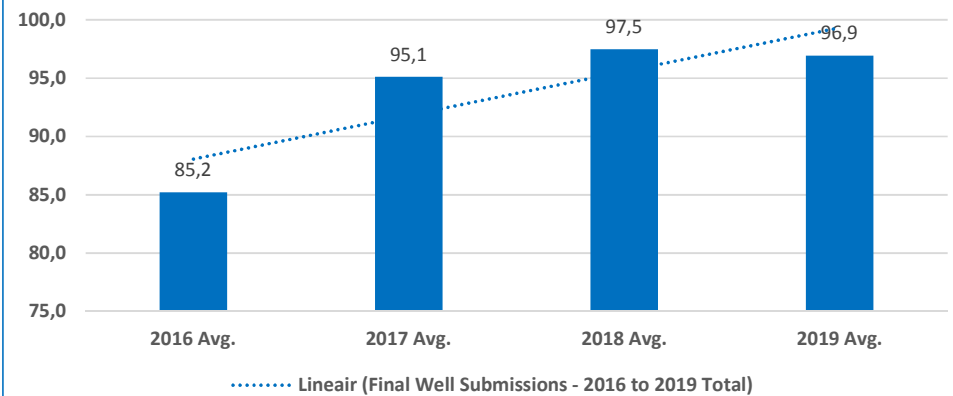# Data Compliance Benchmarking – lessons for Regulators (1)

Overall Well Data Performance Trends - 2016 to 2019

	2016 Avg.	2017 Avg.	2018 Avg.	2019 Avg.
Total	90,6	95,8	96,7	94,3

Legend: Total, Timely, Complete, Usable, Responsive, Lineair (Total)

Initial Well Data Submission Trends - Totals

2016 Avg.	2017 Avg.	2018 Avg.	2019 Avg.
94,6	97,3	95,8	91,8

Lineair (Initial Well Submissions - 2016 to 2019 Total)

Final Well Data Submissions Trends - Totals

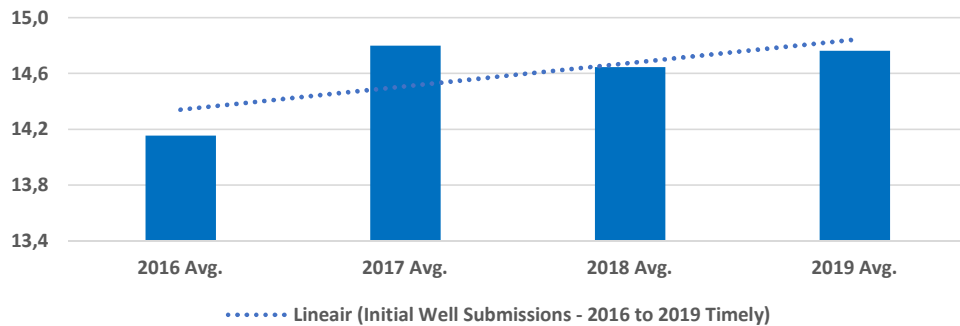| 2016 Avg.	2017 Avg.	2018 Avg.	2019 Avg.
85,2	95,1	97,5	96,9

Lineair (Final Well Submissions - 2016 to 2019 Total)

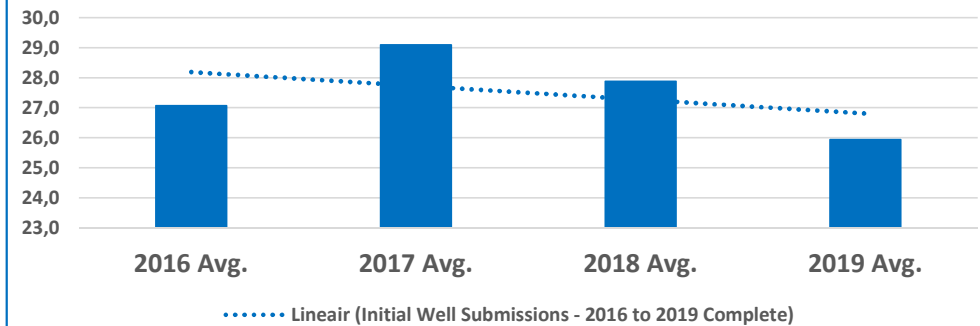# Data Compliance Benchmarking – lessons for regulators (2)

Initial Well Submission Trends - Timely

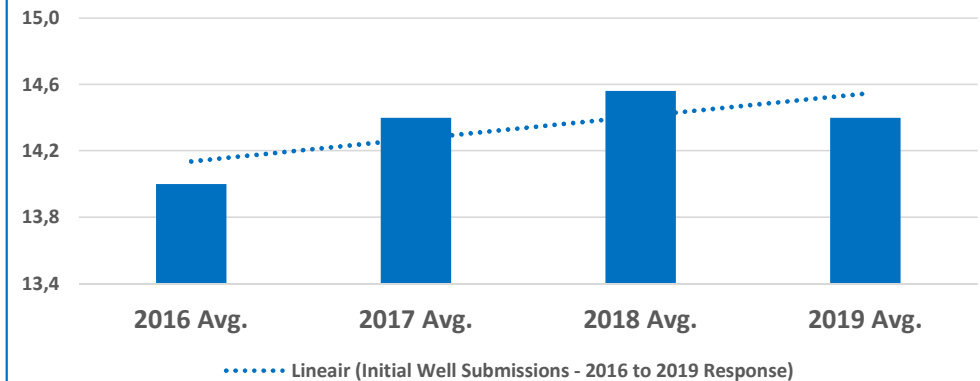Lineair (Initial Well Submissions - 2016 to 2019 Timely)

Initial Well Submission Trends - Complete

Lineair (Initial Well Submissions - 2016 to 2019 Complete)

Initial Well Submission Trends - Usable

Lineair (Initial Well Submissions - 2016 to 2019 Usable)
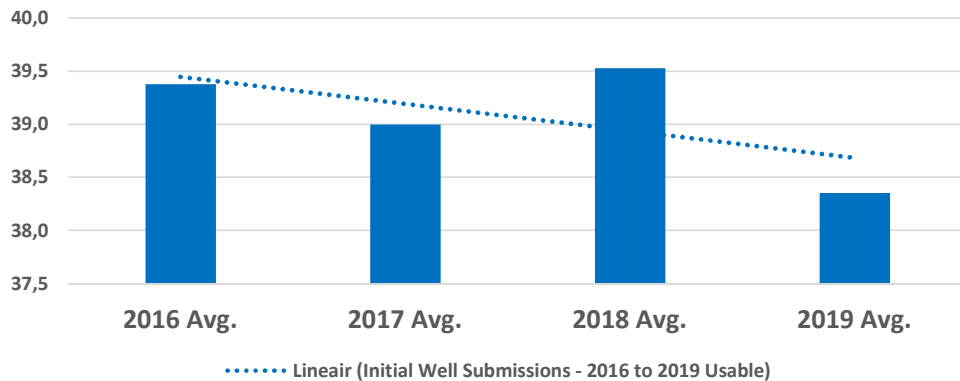
## Initial Well Submission Trends - Responsive

Lineair (Initial Well Submissions - 2016 to 2019 Response)

What's next?

Data Team – 2019 & 2020 Initiatives

- Data compliance benchmarking
- Regulation & guidance development
- NOPIMS business processes & future program
- Linking discovery/delivery with titles & record systems
- Resource management data & statistics
- Review of survey quality control processes
- International liaison & consultation
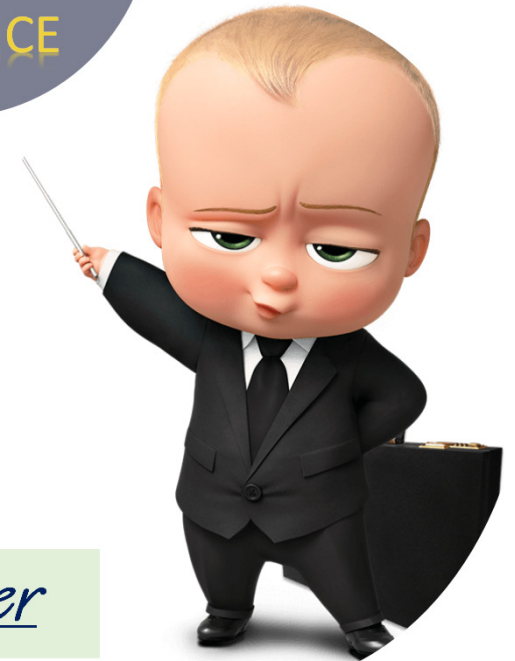
We are open to ideas and ways of doing things better

BEST PRACTICE

NOPTA's Data Team - warning, not really us ....

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We contribute a positive and professional reputation to NOPTA

We work here because we are passionate about what we do and we do it with integrity

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