



MANATO OHARA
Japan
Manato has type 1 diabetes

SEND at Novo Nordisk A/S

Learnings in Non-clinical Data Management



Who are we?

Gitte Koch Ullmann

B.Sc. in Mech. Engineering

In the clinical area since 1997

In the non-clinical area since 2016

Principal Standards Scientist
Non-clinical Data Management

Pia Jellinggaard

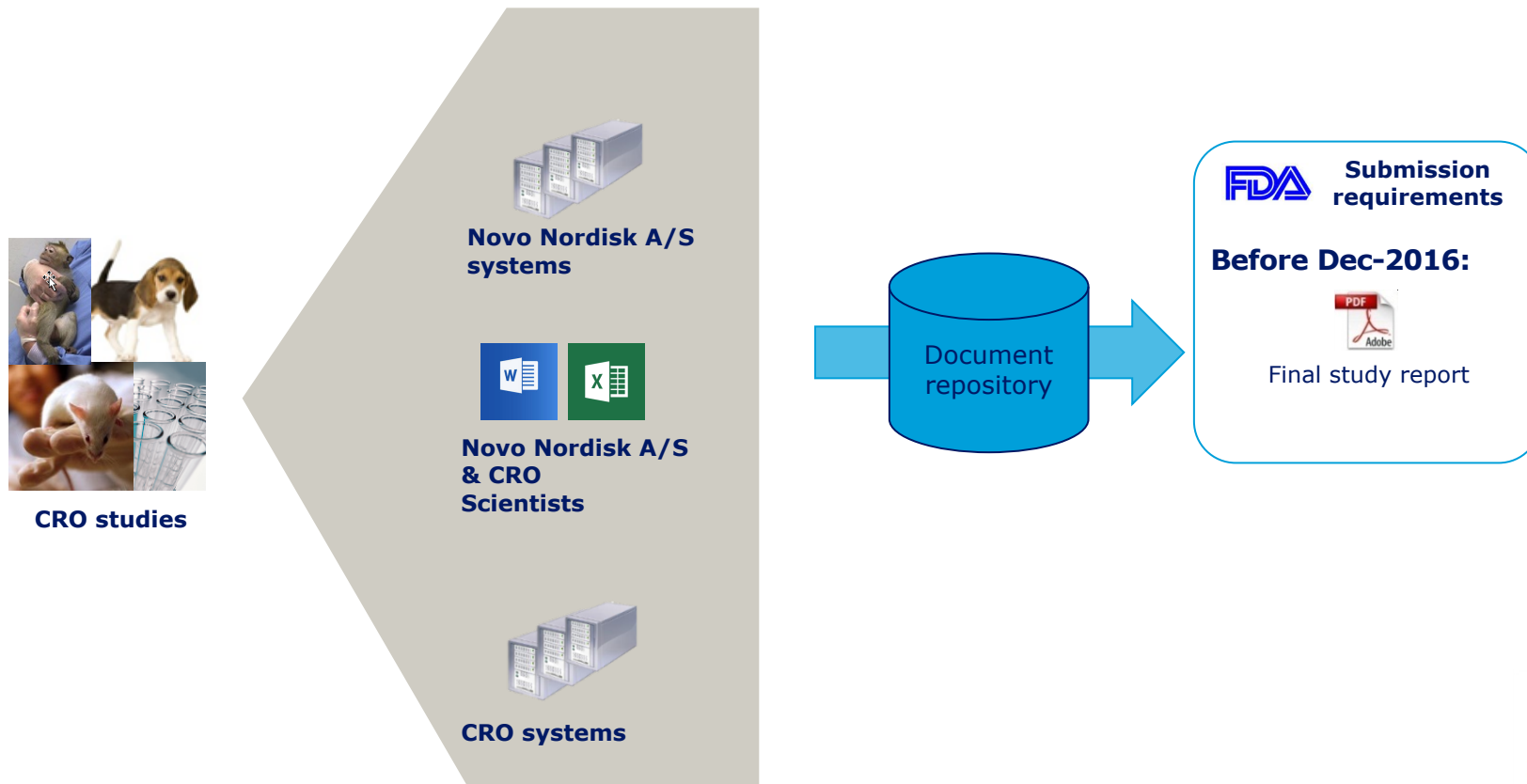
M.Sc. in Clinical Data Management

In the clinical area since 1994

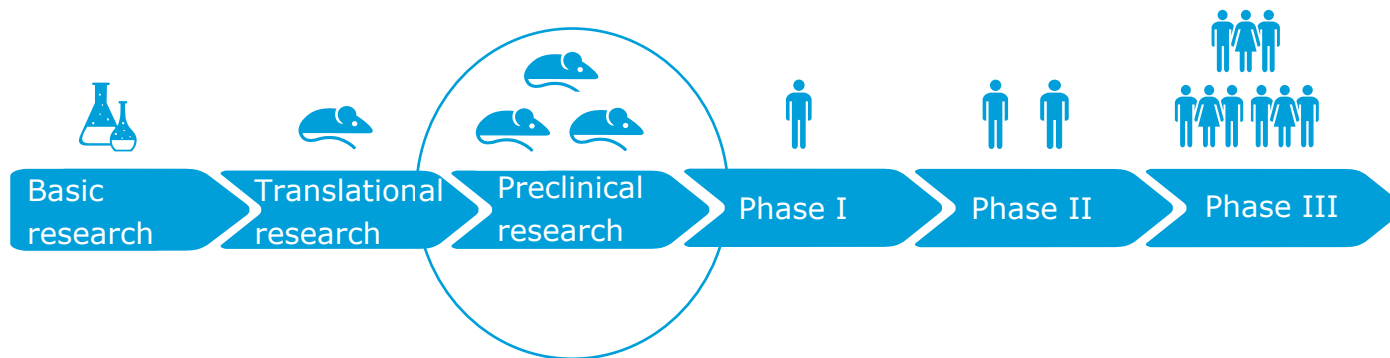
In the non-clinical area since 2013

Manager
Non-clinical Data Management

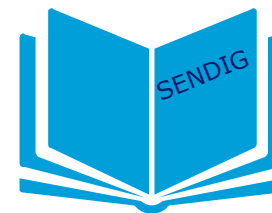
Non-clinical submissions before SEND 3.0



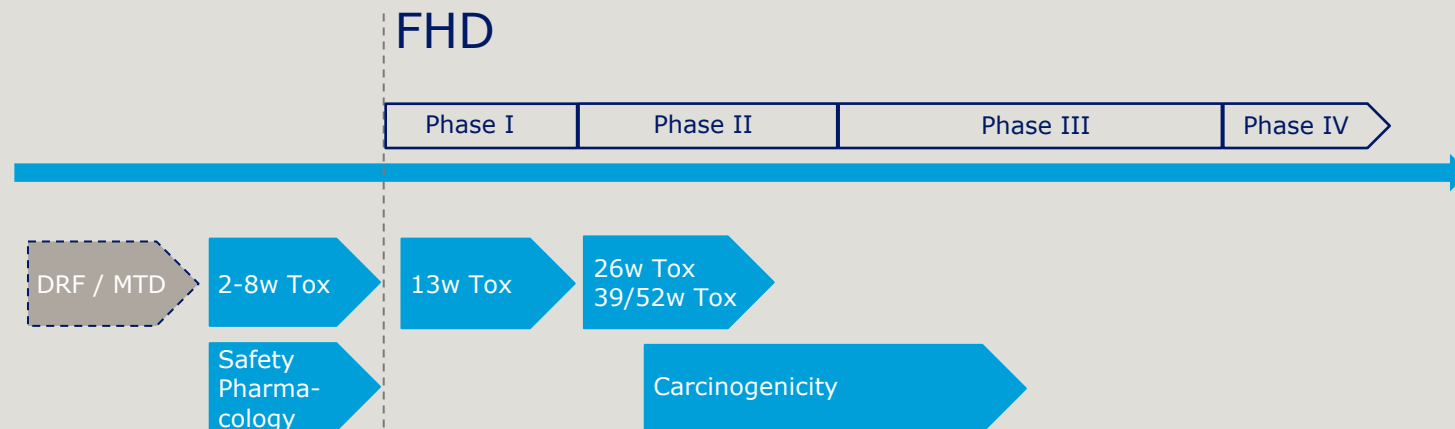
Submission of preclinical data



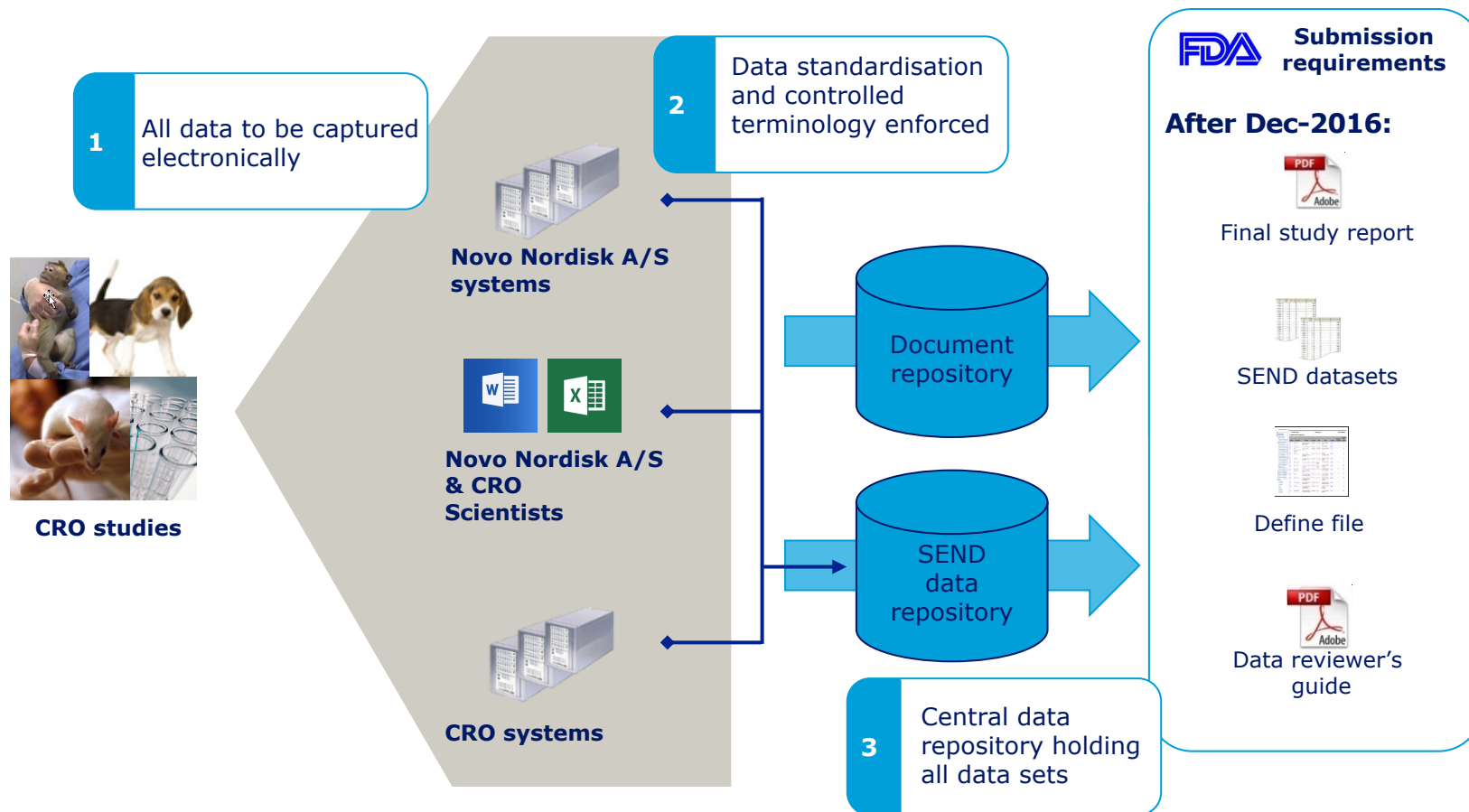
- **SEND**: **S**tandards for **E**xchange of **N**onclinical **D**ata used for preclinical studies (animal testing)
- SEND Implementation Guide corresponds to SDTM Implementation Guide



Study Types covered by SEND



Non-clinical submissions after SEND 3.0

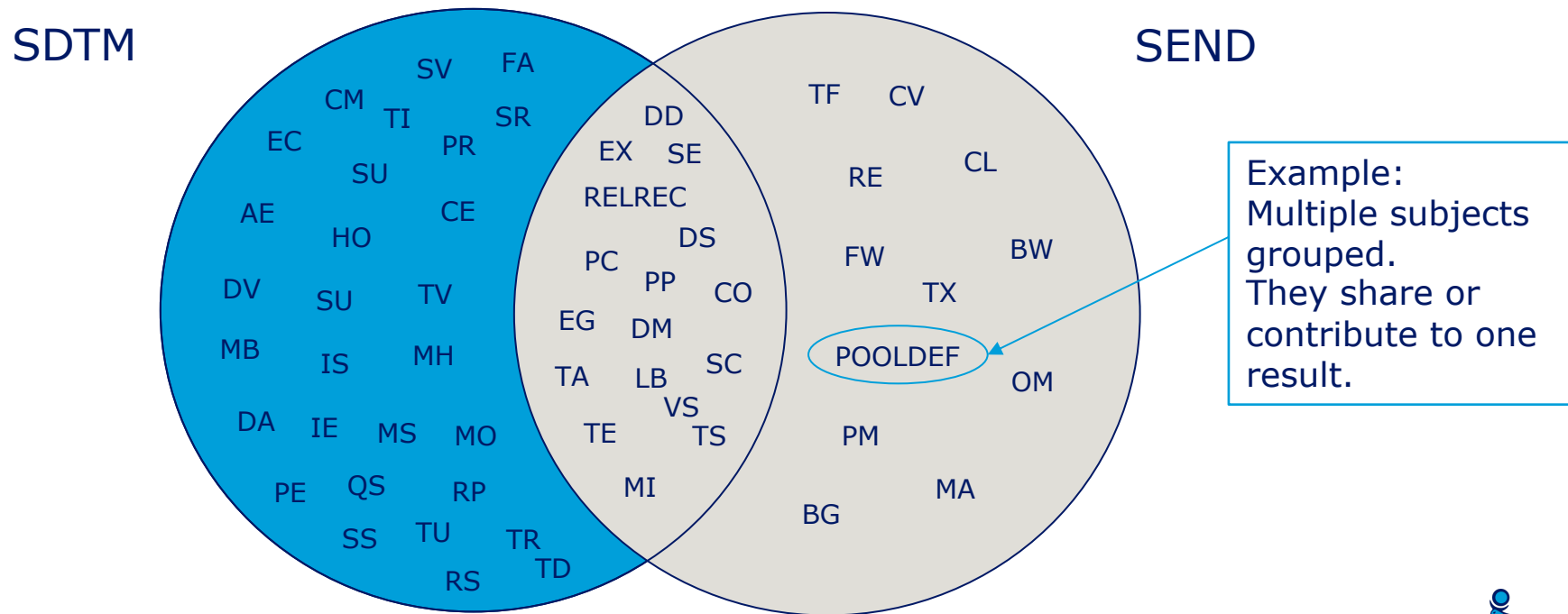




What did we (re-)learn?

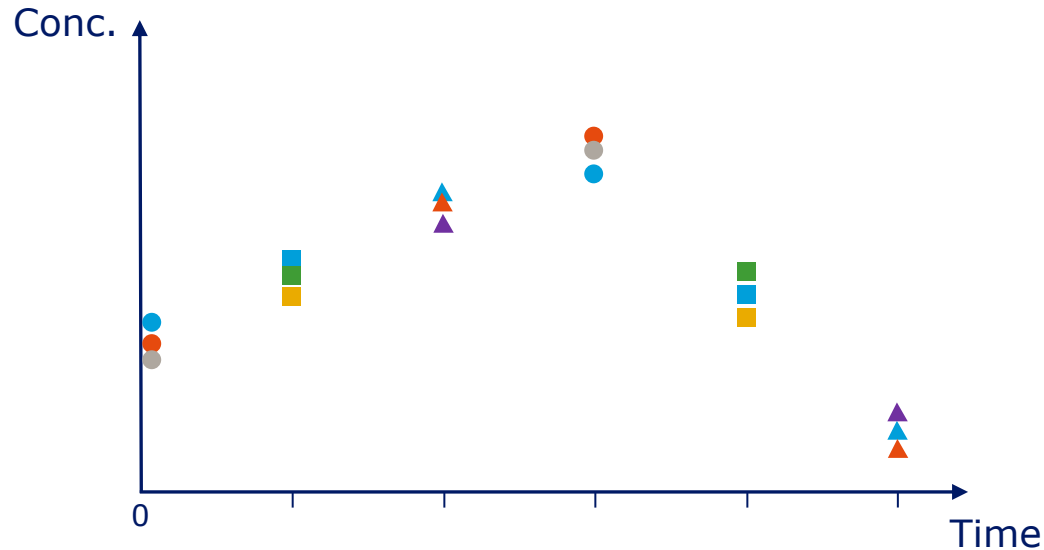
- The waterfall model is not user-friendly
- Simplicity and agility must be thought into all solutions
- So we had to change our ways!
- Today all system changes are preceded with custom programming

SDTM & SEND domains

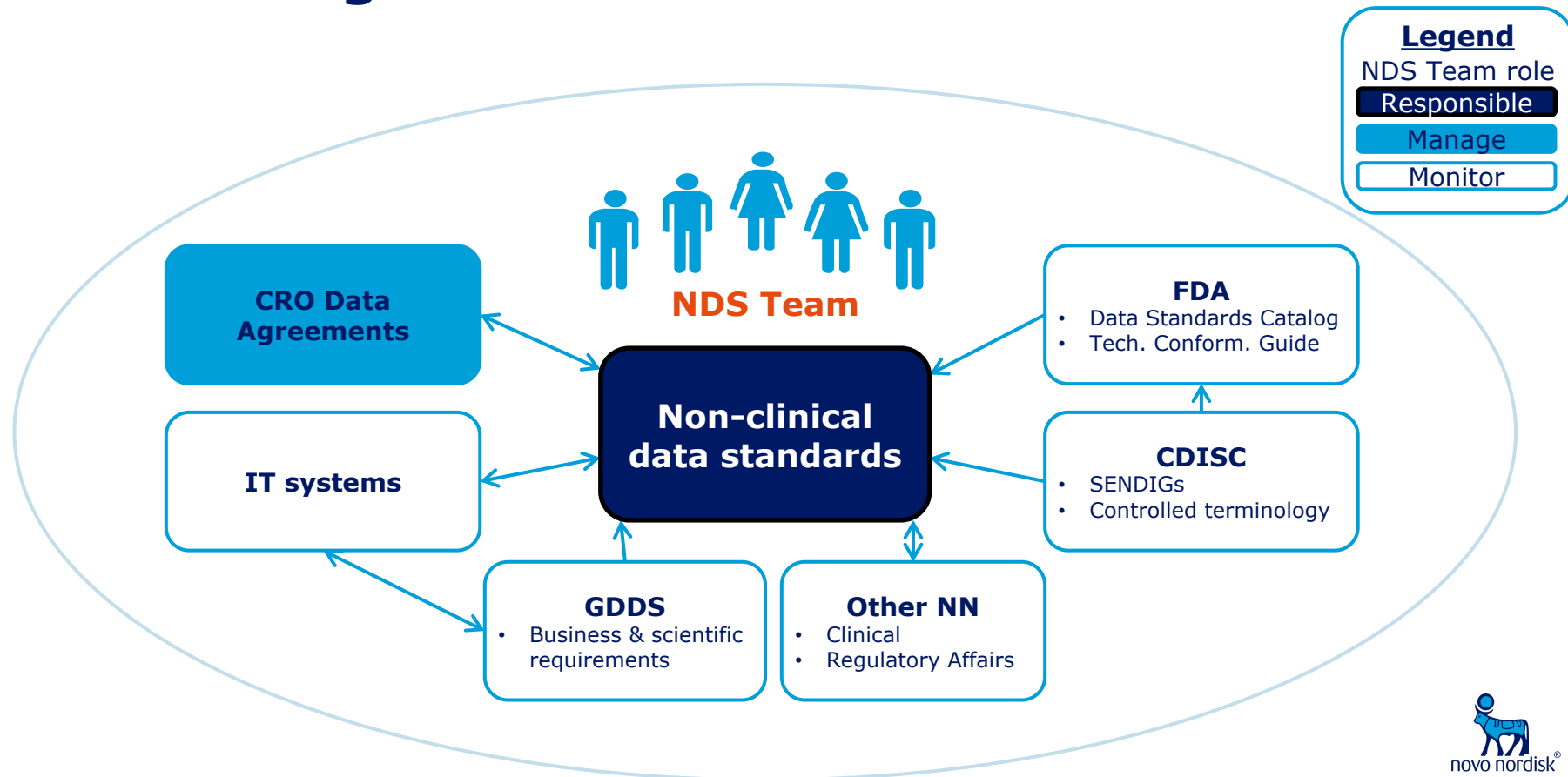


Pharmacokinetic Parameters for small animals

- Multiple subjects contribute to one overall time-concentration profile



Standards governance



So – what did we learn?

- Changes might be necessary – but are difficult to accept
- Once implemented - maintaining the standards and systems in the non-clinical area is a pleasure
- FDA is very interested in further development of the SEND standard and in using the reported data

