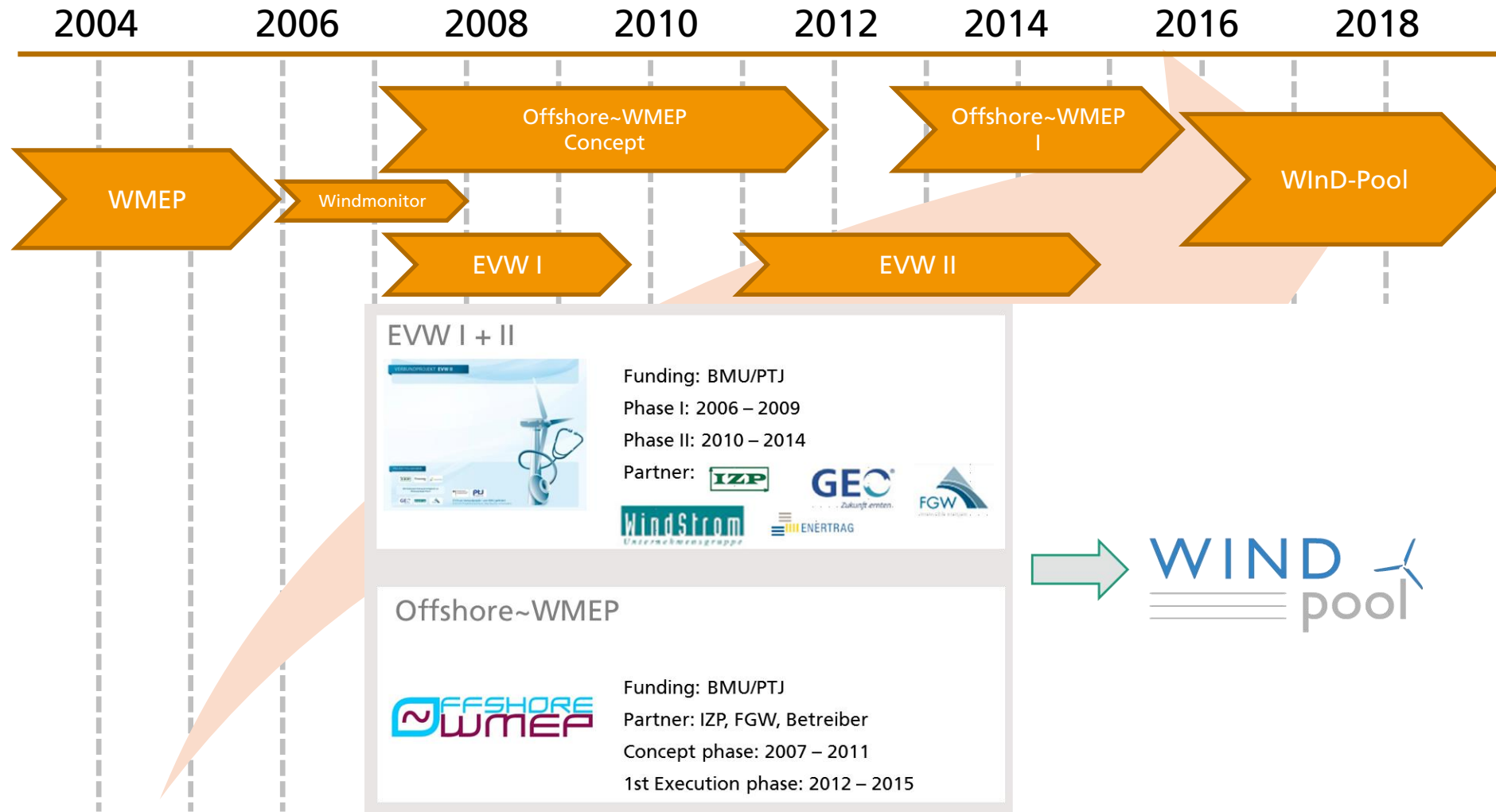


# Wind energy - Information - Data - Pool (WInD-Pool)



# Wind energy - Information - Data - Pool (WInD-Pool)

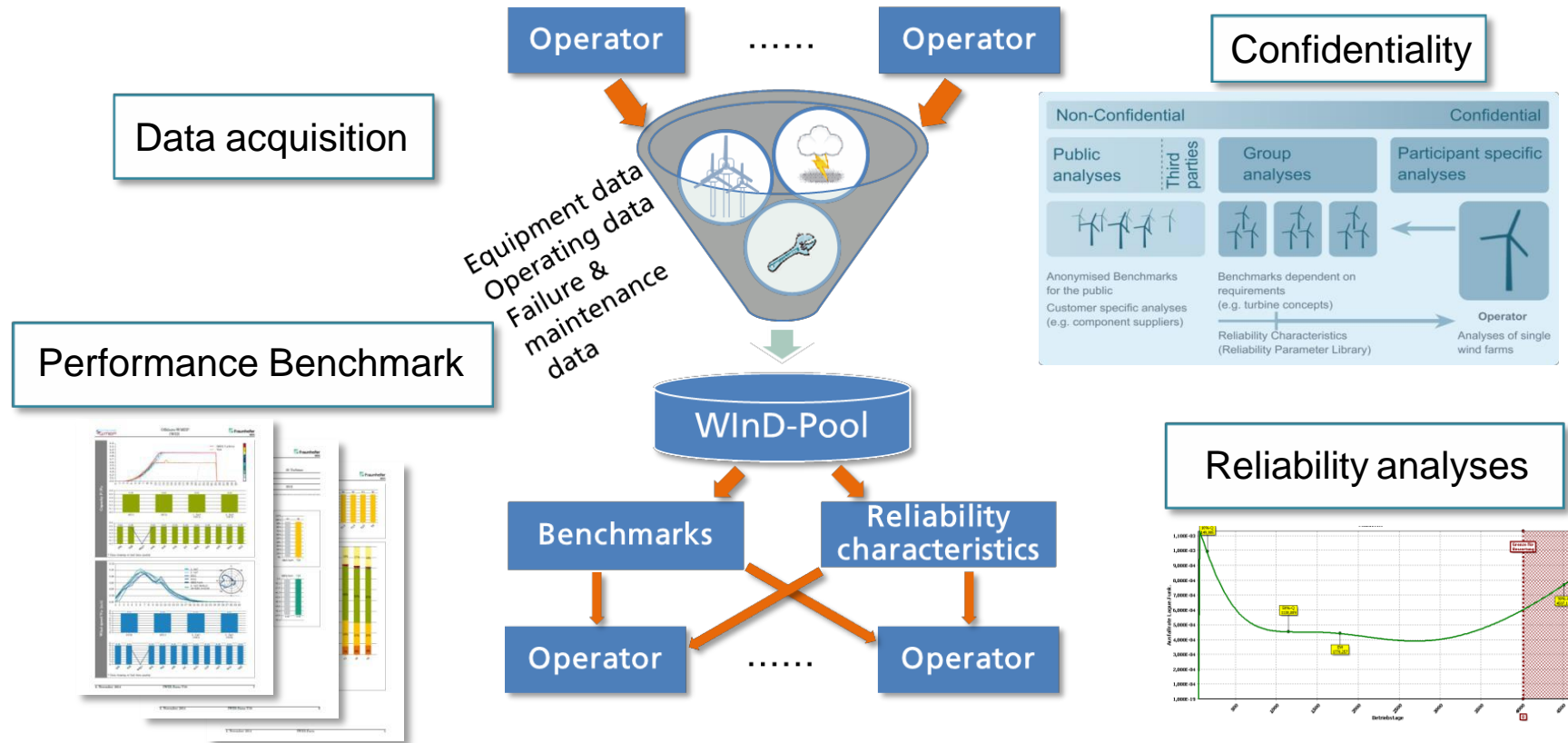


## ■ Big Data?

- Core data, SCADA, status, alarm and maintenance data
- 14 operators, 230 wind farms, 3084 Turbines, 6276 MW, 17 728 operating years
- A total of 1.2 TB of data in the database
- Allows training and testing of new methods



# Wind energy - Information - Data - Pool (WInD-Pool)



# Wind energy - Information - Data - Pool (WInD-Pool)

|                         | WInD-Pool         |                   |                   |
|-------------------------|-------------------|-------------------|-------------------|
|                         | gesamt            | onshore           | offshore          |
| Betreiber               | 14                | 9                 | 6                 |
| Anzahl Windparks        | 230               | 216               | 14                |
| Anzahl WEA              | 3084              | 2468              | 616               |
| Leistung [MW]           | 6276              | 4175              | 2100              |
| Daten im System         | 07/2002 - 10/2018 | 07/2002 - 10/2018 | 06/2009 - 10/2018 |
| Verfügbare Auswertungen | 12/2004 - 10/2018 | 12/2004 - 10/2018 | 10/2009 - 10/2018 |

|          | Betriebsjahre | Mittlere Betriebsjahre |
|----------|---------------|------------------------|
| offshore | 3790          | 6.15                   |
| onshore  | 17069         | 6.92                   |
| gesamt   | 20859         | 6.76                   |

| TypeGroups                     | Location |
|--------------------------------|----------|
| MultibrídM5000                 | offshore |
| Siemens SWT 3.6-Klasse         | offshore |
| Enercon EP 1-Klasse            | onshore  |
| Enercon EP 2-Klasse            | onshore  |
| Enercon EP 3-Klasse            | onshore  |
| GE 1.5-Klasse                  | onshore  |
| GE 2-Klasse                    | onshore  |
| NEG Micon / Vestas 1 MW-Klasse | onshore  |
| Nordex Generation Gamma        | onshore  |
| pro + pro Energ. 70/77         | onshore  |
| Senvion 3.XM-Serie             | onshore  |
| Senvion MM-Serie               | onshore  |
| Vestas V66 / V80               | onshore  |
| Vestas V90 / V112              | onshore  |

| Type Group             | Turbine Types   | Location |
|------------------------|-----------------|----------|
| Multibríd M5000        | Multibríd-M5000 | offshore |
| Siemens SWT 3.6-Klass  | SWT3.6          | offshore |
| Enercon EP 3-Klasse    | E101            | onshore  |
| Enercon EP 1-Klasse    | E40             | onshore  |
| Enercon EP 2-Klasse    | E66             | onshore  |
| Enercon EP 2-Klasse    | E70             | onshore  |
| Enercon EP 2-Klasse    | E82             | onshore  |
| GE 1.5-Klasse          | GE1.5s          | onshore  |
| GE 1.5-Klasse          | GE1.5sl         | onshore  |
| Senvion MM-Serie       | MM92            | onshore  |
| pro + pro Energ. 70/77 | 77              | onshore  |
| Vestas V90 / V112      | V112            | onshore  |
| Vestas V66 / V80       | V66             | onshore  |
| Vestas V66 / V80       | V80             | onshore  |
| Vestas V90 / V112      | V90             | onshore  |