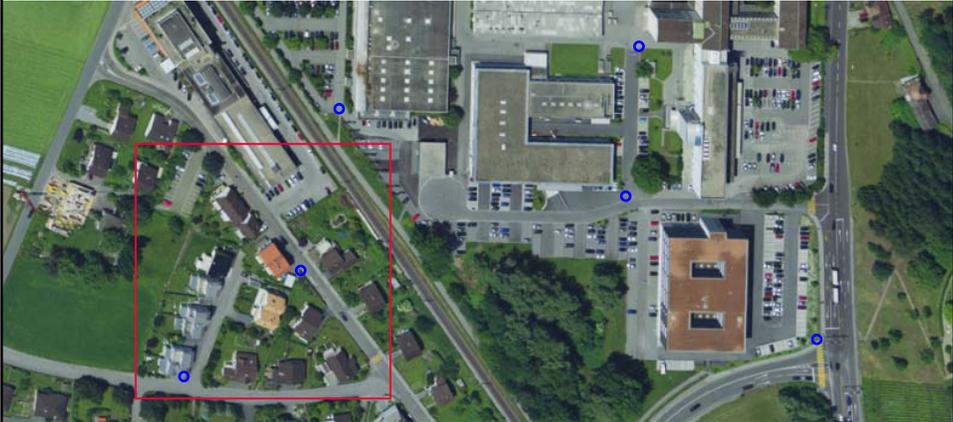


**System 1200 – SmartStation**  
**Scenario: Control Points Exist**



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**System 1200 – SmartStation**  
**Scenario: Control Points Exist**



4

**System 1200 – SmartStation**  
**Scenario: Control Points Exist**



5

**System 1200 – SmartStation**  
**Scenario: Control Points Exist**



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### System 1200 – SmartStation Scenario: Control Points Exist



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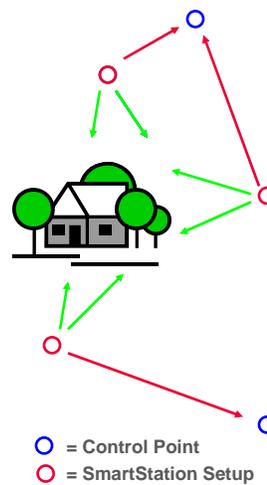
### System 1200 – SmartStation Scenario: Control Points Exist

**Description:**

- Known control points are in the area to be surveyed
- Likely these control points are not conveniently situated to survey detail

**Setup SmartStation where...**

- It is most convenient to survey as much detail as possible
- One known point can be seen – this point is used to orient the TPS
- Not necessary to have inter-visibility between SmartStation setups



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## System 1200 – SmartStation Scenario: Control Points Exist

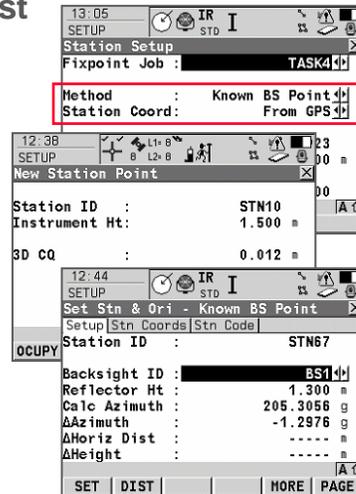
### Choose Setup method

- Method: Known BS Point
- Station Coord: From GPS

### Measure GPS Point

### Aim instrument at BS Point

- Choose BS Point
- F2(DIST) to measure distance
- Press F1(SET)



## System 1200 – SmartStation Scenario: No Control Points



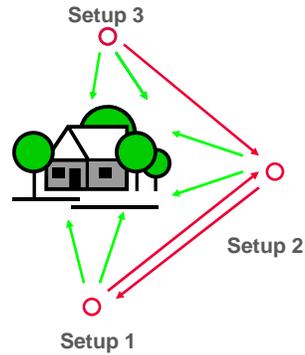
### System 1200 – SmartStation Scenario: No Control Points

**Description:**

- No known control points are in the area to be surveyed

**Setup the SmartStation where...**

- It is most convenient to survey as much detail as possible
- Necessary to have inter-visibility between SmartStation setups
- The SmartStation setups are used to orient other SmartStation setups

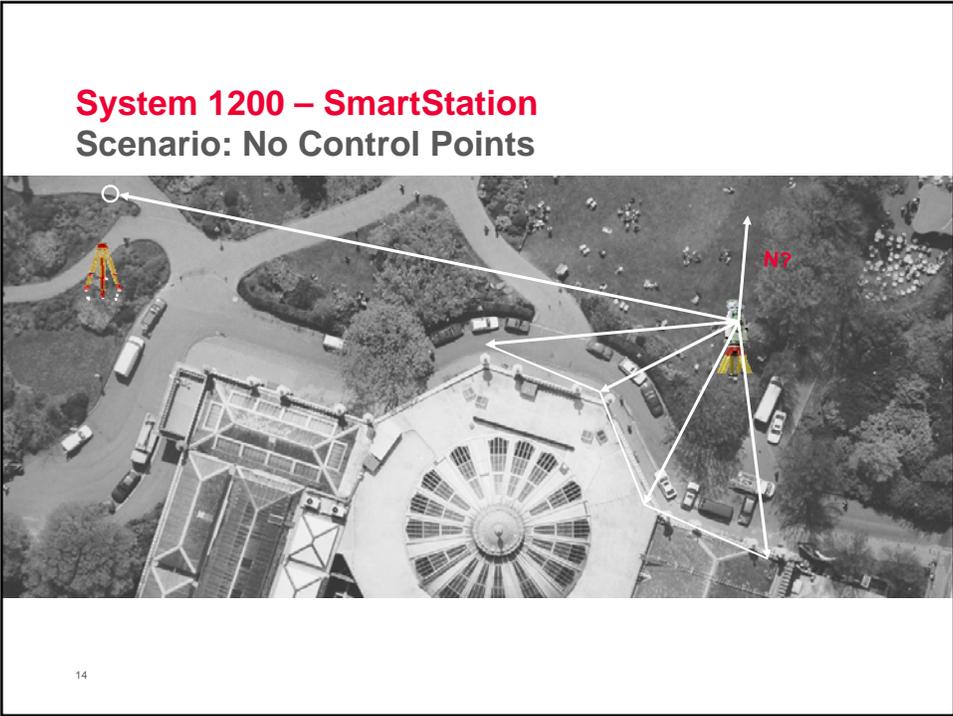
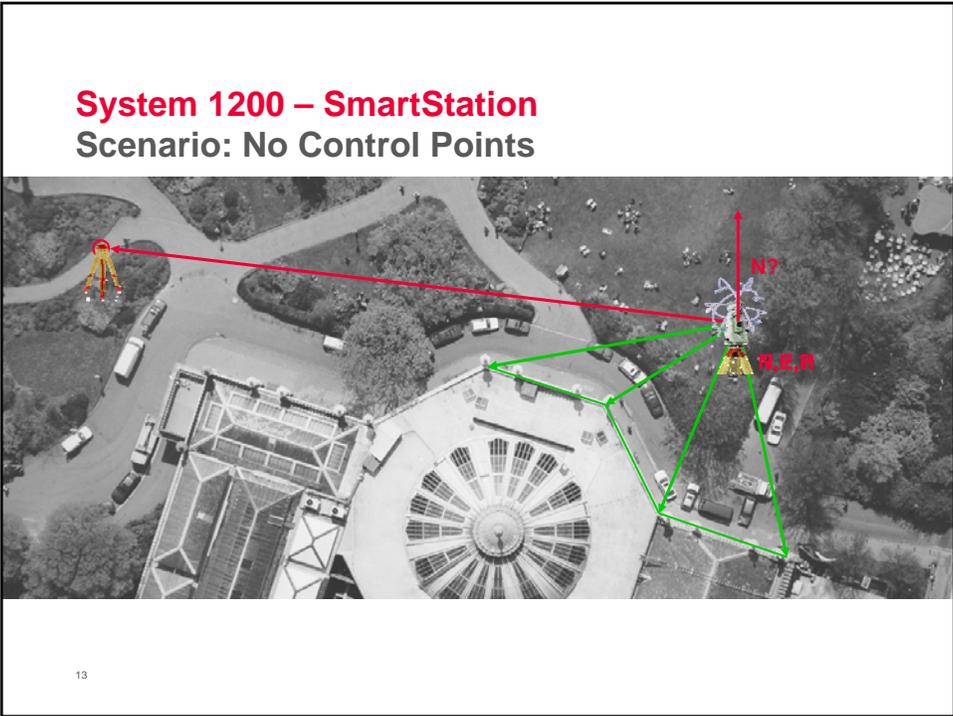


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### System 1200 – SmartStation Scenario: No Control Points



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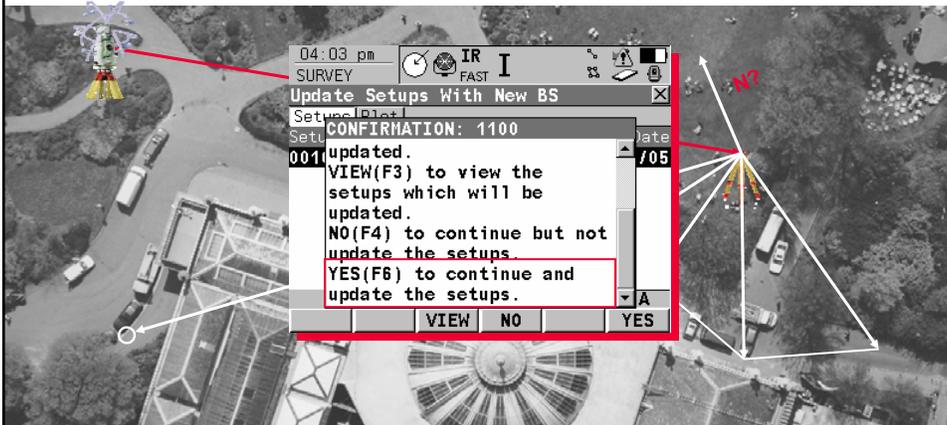


### System 1200 – SmartStation Scenario: No Control Points



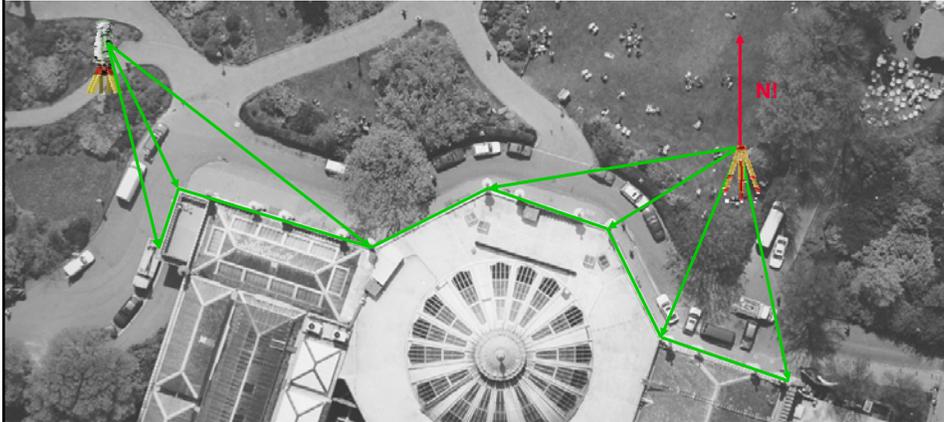
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### System 1200 – SmartStation Scenario: No Control Points



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**System 1200 – SmartStation**  
**Scenario: No Control Points**



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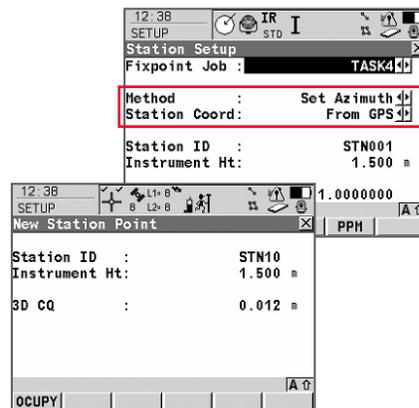
**System 1200 – SmartStation**  
**Scenario: No Control Points**

**Setup on first station**

**Choose Setup method**

- Method: Set Azimuth
- Station Coord: From GPS

**Measure GPS Point**

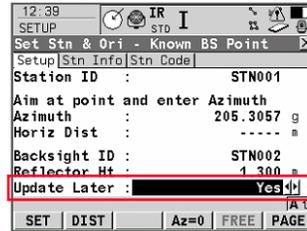


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## System 1200 – SmartStation Scenario: No Control Points

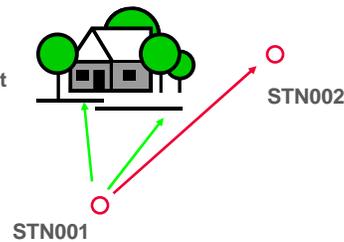
### Aim instrument at next SmartStation setup

- Update Later: Yes
- This means the coords of the backsight point can be updated later
- Press F1(SET)



### Enter survey and measure points

- Measured points are currently „wrong“ since the coords of the second setup point are not yet known
- TPS has a „dummy“ orientation



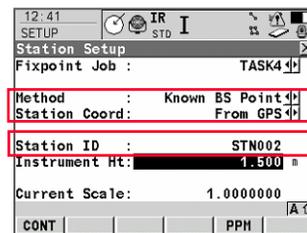
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## System 1200 – SmartStation Scenario: No Control Points

### Setup on second station

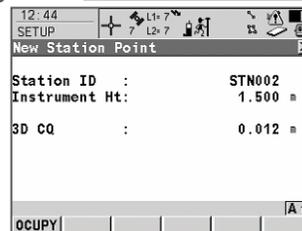
#### Choose Setup method

- Method: Known BS Point
- Station Coord: From GPS
- Ensure to use same point ID as for the BS point at setup 1



#### Measure GPS Point

- F1(OCUPY), F1(STOP), F1(STORE)



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## System 1200 – SmartStation Scenario: No Control Points

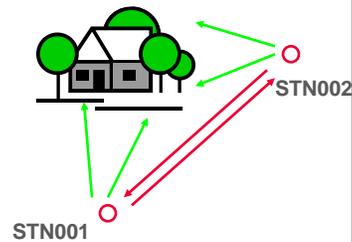
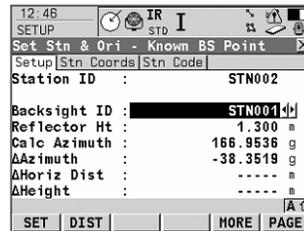
### Aim instrument at first SmartStation setup

- Select first setup as BS point
- F2(DIST) to measure distance and view dHoriz Dist and dHeight
- Press F1(SET)

The TPS is now oriented correctly!

### Enter survey and measure points

- Measured points are correct since the coords of the first setup point are known



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## System 1200 – SmartStation Scenario: No Control Points – Updating Points

Only certain points **will update** an Update Later backsight point

- **Points which will update an Update Later setup...**
  - Normal survey points (both TPS and GPS measured points)
  - Points measured when using other applications - COGO, Stakeout, Ref Line, Ref Plane...
- **Points which will not update an Update Later setup...**
  - Auto logged and auto logged offset points
  - Imported ASCII or GSI points

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## System 1200 – SmartStation Scenario: No Control Points – Updating Points

Only certain points **are updated** after an Update Later backsight point is updated

- **Points which will be updated**
  - TPS measured points from survey and other applications
  - TPS auto logged and auto logged offset points (not GPS points)
  - Points measured when using other applications - COGO, Stakeout, Ref Line, Ref Plane...
  
- **Points which are not updated**
  - GPS measured points
  - Other TPS setups (no chain effect along a traverse)
  - COGO calculations

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## System 1200 – SmartStation Scenario: Coordinate System Unknown



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## System 1200 – SmartStation Scenario: Coordinate System Unknown

### Description

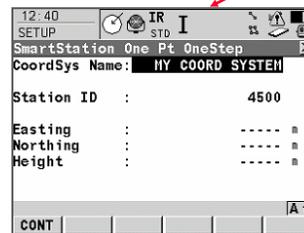
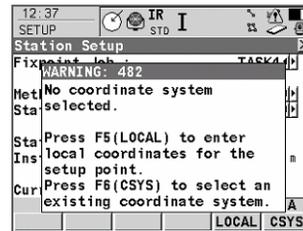
- User wishes to use SmartStation during setup but Coord System is not known

### Must have Coord System to use SmartStation...

- GPS point is stored as WGS84
- TPS Setup application needs grid coords
- Therefore, coord system is needed

### If no Coord System is selected...

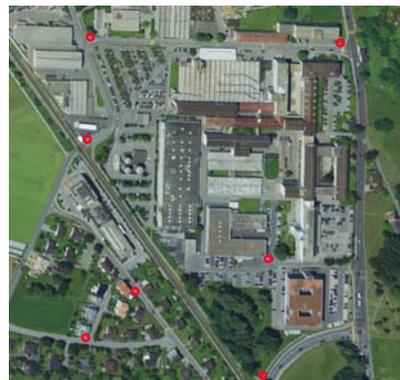
- F5(LOCAL) to create coord system  
→ TPS Setup application allows a OneStep coord system to be computed during Setup!
- F6(CSYS) to choose coord system



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## System 1200 – SmartStation Scenario: Coordinate System Unknown

- Alternatively, there may be control points in area to compute a coord system
- The „GPS Survey“ application on TPS...
  - Allows GPS points to be collected more „comfortably“ than using the Setup application
  - Then use „Determine Coord System“ application to calculate the coord system



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