A. **CITY SPECIFIC INFORMATION**

1. Name of City:

2. Task Force Nominee Name & Designation:

3. Nominating Organization's Name:

4. Address

5. Phone No.

6. Fax. No.

7. Email:

8. Website:

B. STATUS OF THE SUBSURFACE NETWORKS

B.1 SEWERAGE SYSTEM

1. **Diameters**

Below 300 mm		300 ~ 900 mm		900 ~ 1500 mm		1500 ~ 2400 mm		Above 2400 mm	
Material	Length	Material	Length	Material	Length	Material	Length	Material	Length

2. **Hydraulic Performance**
Hydraulic failures are situations where pipelines are overwhelmed by the hydraulic loads & flooding over the ground occurs.

2.1 Flooding incidents ____________nos. per year
2.2 Duration of flooding ___________hrs. (average)

3. **Environmental Performance**
Environmental failures are situations linked to hydraulic failures & develop the following:

A. Combined sewer overflows
B. Pollution of bathing waters
C. Polluted wet weather discharge
D. Damage to other amenities

3.1 Incidences of environmental failure ________nos.
3.2 Duration of such failure _________ hours.
3.3 Damage details (Please use separate sheets if required)

4. **Structural Performance**
Structural failure leads to structural instability like development of cracks / dropped inverts / joint separation / disfigurement of pipelines.

4.1 **In pipes below 300 mm**

- Failure Numbers _________% (Per Annum)
- Failed length vs. total entire length _________%
- Failure types I (blockage / leaks) _________%
- Failure types II (crack appearance) _________%
- Failure types III (crack widening) _________%
- Failure types IV (joint separation) _________%
- Failure types V (collapse) _________%

Cont.

4.2 **300 – 900 mm**

- Failure Numbers _________% (*Per Annum*)
- Failed length vs. total entire length _________%
- Failure types I
  (blockage / leaks) _________%
- Failure types II
  (crack appearance) _________%
- Failure types III
  (crack widening) _________%
- Failure types IV
  (joint separation) _________%
- Failure types V
  (collapse) _________%

4.3 **900 – 1500 mm**

- Failure Numbers _________% (*Per Annum*)
- Failed length vs. total entire length _________%
- Failure types I
  (blockage / leaks) _________%
- Failure types II
  (crack appearance) _________%
- Failure types III
  (crack widening) _________%
- Failure types IV
  (joint separation / dropped invert) _________%
- Failure types V
  (collapse) _________%

4.4 **1500 – 2400 mm**

- Failure Numbers _________% (*Per Annum*)
- Failed length vs. total entire length _________%
- Failure types I
  (blockage / leaks) _________%
- Failure types II
  (crack appearance) _________%
- Failure types III
  (crack widening) _________%
- Failure types IV
  (joint separation / dropped invert) _________%
- Failure types V
  (collapse) _________%

Cont.

4.5 **Above 2400 mm**

- Failure Numbers _________% (*Per Annum*)
- Failed length vs. total entire length _________%
- Failure types I
  (blockage / leaks) _________%
- Failure types II
  (crack appearance) _________%
- Failure types III
  (crack widening) _________%
- Failure types IV
  (joint separation / dropped invert) _________%
- Failure types V
  (collapse) _________%

5. **Operational Performance**
   Operational performance is the indicator to evaluate the overall performance of the pipeline and is the indicator of the network health.

   5.1 Flooding as in point 4 above
   5.2 Pollution as in point 5 above
   5.3 Other like odor / hygiene complaints

6. **Practiced Rectification Systems :** Conventional (*Please attach additional sheets*)
   Trenchless (*Please attach additional sheets*)

7. **Asset information / tracking software / Method** (*Please attach additional sheets*)

8. **Overall performance statement**
   (Please mention the comments on the overall performance of the complete system on separate sheets.)

B.2 **DRAINAGE SYSTEMS**

1. **Diameters**

Below 300 mm		300 ~ 900 mm		900 ~ 1500 mm		1500 ~ 2400 mm		Above 2400 mm	
Material	Length	Material	Length	Material	Length	Material	Length	Material	Length

2. **Hydraulic Performance**
Hydraulic failures are situations where pipelines are overwhelmed by the hydraulic loads & flooding over the ground occurs.

2.1 Flooding incidents ____________nos. per year
2.2 Duration of flooding ___________hrs. (average)

3. **Environmental Performance**
Environmental failures are situations linked to hydraulic failures & develop the following:

A. Combined sewer overflows
B. Pollution of bathing waters
C. Polluted wet weather discharge
D. Damage to other amenities

3.1 Incidences of environmental failure ________nos.
3.2 Duration of such failure _________ hours.
3.3 Damage details (*Please use separate sheets if required*)

4. **Structural Performance**
Structural failure leads to structural instability like development of cracks / dropped inverts / joint separation / disfigurement of pipelines.

4.1 **In pipes below 300 mm**

- Failure Numbers _________% (*Per Annum*)
- Failed length vs. total entire length _________%
- Failure types I
  (blockage / leaks) _________%
- Failure types II
  (crack appearance) _________%
- Failure types III
  (crack widening) _________%
- Failure types IV
  (joint separation) _________%
- Failure types V
  (collapse) _________%

Cont.

4.2 **300 – 900 mm**

- Failure Numbers ________% (*Per Annum*)

- Failed length vs. total entire length ________%
- Failure types I
  (blockage / leaks) ________%
- Failure types II
  (crack appearance) ________%
- Failure types III
  (crack widening) ________%
- Failure types IV
  (joint separation) ________%
- Failure types V
  (collapse) ________%

4.3 **900 – 1500 mm**

- Failure Numbers ________% (*Per Annum*)

- Failed length vs. total entire length ________%
- Failure types I
  (blockage / leaks) ________%
- Failure types II
  (crack appearance) ________%
- Failure types III
  (crack widening) ________%
- Failure types IV
  (joint separation / dropped invert) ________%
- Failure types V
  (collapse) ________%

4.4 **1500 – 2400 mm**

- Failure Numbers ________% (*Per Annum*)

- Failed length vs. total entire length ________%
- Failure types I
  (blockage / leaks) ________%
- Failure types II
  (crack appearance) ________%
- Failure types III
  (crack widening) ________%
- Failure types IV
  (joint separation / dropped invert) ________%
- Failure types V
  (collapse) ________%

Cont.

4.5 **Above 2400 mm**

- Failure Numbers _________% (*Per Annum*)
- Failed length vs. total entire length _________%
- Failure types I (blockage / leaks) _________%
- Failure types II (crack appearance) _________%
- Failure types III (crack widening) _________%
- Failure types IV (joint separation / dropped invert) _________%
- Failure types V (collapse) _________%

5. **Operational Performance**
Operational performance is the indicator to evaluate the overall performance of the pipeline and is the indicator of the network health.

5.1 Flooding as in point 4 above
5.2 Pollution as in point 5 above
5.3 Other like odor / hygiene complaints

6. **Practiced Rectification Systems :** Conventional (*Please attach additional sheets*)
Trenchless (*Please attach additional sheets*)

7. **Asset information / tracking software / Method** (*Please attach additional sheets*)

8. **Overall performance statement**
(Please mention the comments on the overall performance of the complete system on separate sheets.)

B.3 **WATER SUPPLY**

1. **Diameters**

Below 300 mm		300 ~ 900 mm		900 ~ 1500 mm		1500 ~ 2400 mm		Above 2400 mm	
Material	Length	Material	Length	Material	Length	Material	Length	Material	Length

2. **Unaccounted for water % recorded**
Unaccounted for water is the difference between the quantity of water supplied and build.

3. **Environmental Performance**
Environmental failures in water supply lines lead to infiltration of untreated / polluted waters in the networks. The indicators are out break of water-borne epidemics in the supply zone.

3.1 Reported incidences of environmental failure ________Nos.
3.2 Incident details (*Please use separate sheets if required*)

4. A. Unusual pressure drop locations __________Nos.

B. Pipeline Condition

B.1 Number of Leaks __________Nos.

B.2 Leaks (Small) __________Nos.

B.3 Leaks (Medium) __________Nos.

B.4 Leaks (Large) __________Nos.

5. **Practiced Rectification Systems :** Conventional (*Please attach additional sheets*)
Trenchless (*Please attach additional sheets*)

6. **Asset information / tracking software / Method** (*Please attach additional sheets*)

7. **Overall performance statement**
(Please mention the comments on the overall performance of the complete system on separate sheets.)

C. **EVALUATION & DOCUMENTATION OF CURRENT PRACTICES**
(Please attach additional sheets for each response)

C.1 **SUBSURFACE PROJECTS CURRENTLY UNDER IMPLEMENTATION**
(Please attach additional sheets for each response)

Type: Water / Sewer / Drainage / Electrical / Cables / Telecom Cables

Size / Dia:

Line Material:

Construction Method: Open cut / Trenchless

Work Status: (% Complete)

(Please prepare separate sheet for each project)

C.2 **SUBSURFACE PROJECTS UNDER PLANNING**
(Please attach additional sheets for each response)

Type: Water / Sewer / Drainage / Electrical / Cables / Telecom Cables

Size / Dia:

Line Material:

Construction Method: Open cut / Trenchless

Work Status: (% Complete)

(Please prepare separate sheet for each project)

C.3 **SUBSURFACE PROJECTS UNDER DPR**
(Please attach additional sheets for each response)

Type: Water / Sewer / Drainage / Electrical / Cables / Telecom Cables

Size / Dia:

Line Material:

Construction Method: Open cut / Trenchless

Work Status: (% Complete)

(Please prepare separate sheet for each project)