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**ENGLISH ONLY** 

## Annual status report of the annual inventory of the Russian Federation

- 1. This status report was prepared by the secretariat as part of the initial check of the annual inventory submitted in accordance with decision 15/CMP.1. It reflects the content of the inventory submission of 2009 as originally submitted by the Party.
- 2. In this report, the following abbreviations are used:

A: afforestation

AAU: assigned amount unit CER: certified emission reduction CM: cropland management CRF: common reporting format

D: deforestation

ERU: emission reduction unit FM: forest management GM: grazing land management

GHG: greenhouse gas

KP-LULUCF: Article 3, paragraphs 3 and 4, activities under the Kyoto Protocol

ICER: long-term certified emission

reduction

LULUCF: land use, land-use change and

forestry

NIR: national inventory report

R: reforestation RMU: removal unit RV: revegetation

SBDT: sectoral background data tables SEF: standard electronic format tCER: temporary certified emission

reduction

Notation keys
C: confidential

IE: included elsewhere NA: not applicable NE: not estimated NO: not occurring

Greenhouse gases
CO<sub>2</sub>: carbon dioxide
CH<sub>4</sub>: methane
N<sub>2</sub>O: nitrous oxide

HFCs: hydrofluorocarbons PFCs: perfluorocarbons SF<sub>6</sub>: sulphur hexafluoride NO<sub>X</sub>: nitrogen oxides CO: carbon monoxide

NMVOCs: non-methane volatile organic

compounds

SO<sub>2</sub>: sulphur dioxide

|                     |  | GREEN               | HOUSE                  | GAS IN                            | VENTO                 | RY SUB    | MISSION                    |                                 |                    |   |        |
|---------------------|--|---------------------|------------------------|-----------------------------------|-----------------------|-----------|----------------------------|---------------------------------|--------------------|---|--------|
|                     |  | Date of             | receipt                |                                   | Date of               | resubmi   | ssion                      | Comment                         | s                  |   |        |
| u                   | NIR  | 14 May              | 2009                   |                                   |                       |           |                            |                                 |                    |   |        |
| natio               | CRF tables <sup>a</sup>  | 15 April            | 2009                   |                                   |                       |           |                            |                                 |                    |   |        |
| forn                | Additional information <sup>b</sup>  |                     |                        |                                   |                       |           |                            |                                 |                    |   |        |
| al in               | CRF provided for years   | 1990–20             | 007                    |                                   |                       |           |                            |                                 |                    |   |        |
| General information | Base year or period <sup>c</sup>   | 1990                |                        |                                   | Base ye               | ar for HF | Cs, PFCs a                 | nd SF <sub>6</sub> <sup>d</sup> | 1995               |   |        |
| Ď                   | Gases covered  | CO <sub>2</sub>     | CH <sub>4</sub>        | N <sub>2</sub> O                  | HFCs                  | PFCs      | SF <sub>6</sub>            | $NO_X$                          | CO                 | NMVOCs  | $SO_2$ |
|                     |  | ✓                   | ✓                      | ✓                                 | ✓                     | ✓         | ✓                          | ✓                               | ✓                  | ✓   | ✓      |
| NIR                 | Description  | reporting<br>recomm | g guidelii<br>ended an | nes <sup>e</sup> (dec<br>nex "Ass | ision 18/<br>sessment | CP.8). Ho | owever, all<br>eteness and | chapters ha                     | ave been ) sources | he revised UN<br>restructured a<br>and sinks of | and a  |
|                     | Language of NIR  | Russia              |                        |                                   |                       |           |                            |                                 |                    |   |        |
| CRF                 | Missing source category larger<br>than 7 per cent for categories<br>included in Annex A to the Kyoto<br>Protocol | ies .               |                        |                                   |                       |           |                            |                                 |                    |   |        |

|  | SUBMISSION   | OF SUPPLEMENTAR | RY INFORMATION UNI   | DER ARTICLE 7.1         |
|--|--|-----------------|----------------------|-------------------------|
| P.C.                                   |  | Date of receipt | Date of resubmission | Comments                |
| porting of<br>information <sup>g</sup> | KP-LULUCF information <sup>h</sup>                                   |                 |                      |                         |
| ting                                   | KP-LULUCF CRF <sup>i</sup>   |                 |                      | CRF provided for years: |
| 40                                     | Information on Kyoto units (ERUs, CERs, RMUs and AAUs <sup>j</sup> ) | 14 May 2009     |                      |                         |
| tary                                   | SEF <sup>k</sup> with Kyoto units                                    | 15 April 2009   |                      |                         |
| Voluntary re<br>supplementary          | Change in national system <sup>1</sup>                               | 14 May 2009     |                      |                         |
| ddns                                   | Change in national registry <sup>l</sup>                             | 14 May 2009     |                      |                         |
|  | Minimization of adverse impacts <sup>1</sup>                         |                 |                      |                         |

- <sup>a</sup> CRF tables are contained in document FCCC/SBSTA/2006/9, annex II.
- <sup>b</sup> Additional information can be any information submitted by a Party in conjunction with the NIR or CRF tables.
- <sup>c</sup> Parties included in Annex I to the Convention undergoing the process of transition to a market economy may use a base year or a period of years other than 1990, in accordance with the provisions of Article 4, paragraph 6, of the Convention and decisions 9/CP.2 and 11/CP.4.
- A Party may select 1990 or 1995 as the base year for the fluorinated gases in accordance with Article 3, paragraph 8, of the Kyoto Protocol.
- e "Guidelines for the preparation of national communications by Parties included in Annex I to the Convention, Part I: UNFCCC reporting guidelines for annual inventories" (FCCC/SBSTA/2006/9).
- A Party has not reported an estimate for an Annex A category that accounted for 7 per cent or more of the Party's aggregate emissions (decision 15/CMP.1, para. 3 (b)).
- g Parties are required to submit supplementary information under Article 7, paragraph 1, of the Kyoto Protocol from the 2010 submission; however, they may elect to submit this information on a voluntary basis before this submission.
- h Parties are required to include in their annual inventories information on anthropogenic GHG emissions by sources and removals by sinks from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol, and, if any, elected activities under Article 3, paragraph 4, in accordance decision 15/CMP.1, annex, paragraphs 5-9.
- Parties are required to report anthropogenic GHG emissions by sources and removals by sinks from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol, and, if any, elected activities under Article 3, paragraph 4, using the agreed CRF tables adopted under decision 6/CMP.3. Parties are required to report these tables on a mandatory basis commencing with the 2010 submission; however, they may elect to report these tables on a voluntary basis before this submission. Parties may also elect to report these tables for the base year or 1990.
- Parties are required to include in their annual inventory information on ERUs, CERs, tCERs, lCERs, AAUs and RMUs, in accordance with decision 15/CMP.1, annex, section E.
- k SEF for reporting Kyoto Protocol units, as adopted under decision 14/CMP.1 and required by decision 15/CMP.1, annex, paragraph 11.
- <sup>1</sup> The requirements for Parties to report on changes in national systems in accordance with Article 5, paragraph 1, changes in national registries, and the minimization of adverse impacts in accordance with Article 3, paragraph 14, are set out in sections F, G and H, respectively, of the annex to decision 15/CMP.1.

## PART I Provision of information for the latest reported inventory year in the common reporting format: 2007

|                  | 21011                                | sion of in |                |                   |          | p                          |          | , ,              | ,      |        |            | P          | 9               |                 |                 |         |
|------------------|--------------------------------------|------------|----------------|-------------------|----------|----------------------------|----------|------------------|--------|--------|------------|------------|-----------------|-----------------|-----------------|---------|
|                  |                                      | Ener       | gy             | Industr<br>proces |          | Solvent<br>othe<br>product | er       | Agricı           | ılture | LU     | JLUCI      | F K        | P-LULUC         | CF <sup>a</sup> | V               | √aste   |
|                  | Sectoral report                      | 1          | ✓              | 2(I)              | ✓        | 3                          | ✓        | 4                | ✓      |        | 5          | 5          | (KP)            |                 | 6               | ✓       |
|                  | tables                               |            |                | 2(II)             | ✓        |                            |          |                  |        |        |            |            |                 |                 |                 |         |
|                  | Sectoral<br>background               | 1.A(a)     | ✓              | 2(I).A-G          | ✓        | 3.A-D                      | ✓        | 4.A              | ✓      | 5.     | Α •        | 5(KF       | ?-I)A.1.1       |                 | 6.A             | ✓       |
|                  | data tables                          | 1.A(b)     | ✓              | 2(II).C           | <b>✓</b> |                            |          | 4.B(a)           | ✓      | 5.     | В          | 5(KF       | P-I)A.1.2       |                 | 6.B             | ✓       |
|                  |                                      | 1.A(c)     | ✓              | 2(II).E           | ✓        |                            |          | 4.B(b)           | ✓      | 5.     | C v        | 5(KP       | P-I)A.1.3       |                 | 6.C             | ✓       |
|                  |                                      | 1.A(d)     | ✓              | 2(II).F           | ✓        |                            |          | 4.C              | ✓      | 5.     | D v        |            | P-I)A.2         |                 |                 |         |
|                  |                                      | 1.B.1      | ✓              |                   |          |                            |          | 4.D              | ✓      | 5      | E v        |            | (KP-<br>A.2.1.  |                 |                 |         |
|                  |                                      | 1.B.2      | ✓              |                   |          |                            |          | 4.E              | ✓      | 5      | .F         | 5(KI       | P-I)B.1.        |                 |                 |         |
|                  |                                      | 1.C        | ✓              |                   |          |                            |          | 4.F              | ✓      | 5 (    | (I) v      | 5(K)       | P-I)B.2.        |                 |                 |         |
| Tables           |                                      | Bunkers    | separa         | itely 🗸           |          |                            |          |                  |        | 5 (    | (I)        | 5(KI       | P-I)B.3.        |                 |                 |         |
| Tak              |                                      |            |                |                   |          |                            |          |                  |        | 5 (I   | (I)        | 5(KI       | P-I)B.4.        |                 |                 |         |
|                  |                                      |            |                |                   |          |                            |          |                  |        | 5 (Г   | <i>V</i> ) | 5(k        | CP-II)1         |                 |                 |         |
|                  |                                      |            |                |                   |          |                            |          |                  |        | 5 (    | <i>V</i> ) | 5(k        | XP-II)2         |                 |                 |         |
|                  |                                      |            |                |                   |          |                            |          |                  |        |        |            | 5(k        | XP-II)3         |                 |                 |         |
|                  |                                      |            |                |                   |          |                            |          |                  |        |        |            | 5(k        | XP-II)4         |                 |                 |         |
|                  |                                      |            |                |                   |          |                            |          |                  |        |        |            |            | CP-II)5         |                 |                 |         |
|                  |                                      |            |                |                   |          |                            |          |                  |        |        |            |            | ounting<br>able |                 |                 |         |
|                  | Summary tables                       | Summar     | y 1.A          |                   | ✓        | Summa                      | ry 1.I   | 3                |        | ✓      | Sum        | mary 2     | aoic            |                 |                 | ✓       |
|                  | Other tables                         | Summar     | y 3            |                   | ✓        | Table 7                    | (Key     | categorie        | es)    | ✓      | Table      | e 9(a) (Co | mpletenes       | ss)             |                 | ✓       |
|                  |                                      | Table 10   | (Trend         | ds)               | ✓        |                            |          |                  | u u    |        | Table      | e 9(b) (Co | mpletenes       | ss)             |                 |         |
|                  | Comments                             |            |                |                   |          |                            |          |                  |        |        |            |            |                 |                 |                 |         |
|                  |                                      |            |                | 1                 |          | 1                          |          |                  |        |        |            | 1          |                 |                 |                 |         |
| Totals           | Provided for gases                   | CO         | <sub>2</sub> ✓ | C                 | CH₄ ✓    | 1                          | N        | <sub>2</sub> O ✓ |        | HFCs   | ✓          | Pl         | ECs ✓           |                 | SF <sub>6</sub> | ✓       |
| T                | Provided for years                   | 1990-      | -2007          | 199               | 90–20    | 07                         | 199      | 90–2007          |        | 1990–  | 2007       | 199        | 90–2007         |                 | 1990–           | 2007    |
| $\mathcal{O}_2$  | Comparison of                        | Refe       | rence a        | pproach           |          | Sector                     | al apı   | oroach           |        |        | nce m      | ore than   | If diff         | ference         |                 |         |
| 93               | CO <sub>2</sub> from fuel combustion |            | ✓              |                   |          |                            | <b>✓</b> | •                |        |        | per ce     | ent        | Explana         |                 | cent<br>ovideo  |         |
| $\mathbb{F}_6$   | Disaggregation b                     | y species  | S              |                   |          | ]                          | HFCs     |                  |        |        | PFCs       |            |                 | SI              | F <sub>6</sub>  | ,       |
| S, S             |                                      |            |                |                   |          |                            | ✓        |                  |        |        | ✓          |            |                 |                 |                 |         |
| , PF(            | Reporting of act                     |            |                |                   |          | Actual                     |          | Potential        |        | Actual |            | Potential  | Act             | ual             | Po              | tential |
| HFCs, PFCs, SF6  | emission estimat<br>halocarbons and  |            | consun         | nption of         |          | ✓                          |          |                  |        | ✓      |            |            | ~               |                 |                 |         |
| $\vdash$         | Used in                              | Summar     | y table        | 1.A               |          | ✓ Se                       | ectora   | ıl report t      | ables  |        | <b>√</b>   | Sectoral   | backgrou        | ınd data        | table           | s 🗸     |
| Notation<br>keys | Comments                             |            |                |                   |          |                            |          | •                |        |        |            |            |                 |                 |                 |         |
| S <sub>x</sub>   |                                      |            |                |                   |          |                            |          |                  |        |        |            |            |                 |                 |                 |         |
| -                |                                      |            |                |                   |          |                            |          |                  |        |        |            |            |                 |                 |                 |         |

<sup>&</sup>lt;sup>a</sup> Parties are required to report anthropogenic GHG emissions by sources and removals by sinks from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol, and , if any, elected activities under Article 3, paragraph 4, using the agreed CRF tables adopted under decision 6/CMP.3.

|                      |      |                              |                           |      |          |          | Prov     | vision ( | of com   | mon r    |          | ART I    |          | oles for | · vears  | s repor  | ted      |          |          |          |          |   |   |
|----------------------|------|------------------------------|---------------------------|------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|---|---|
|                      |      |                              |                           |      |          |          |          |          |          |          |          | Years    |          |          |          |          |          |          |          |          |          |   |   |
|                      |      |                              | Base<br>year <sup>a</sup> | 1990 | 1991     | 1992     | 1993     | 1994     | 1995     | 1996     | 1997     | 8661     | 1999     | 2000     | 2001     | 2002     | 2003     | 2004     | 2005     | 2006     | 2007     | Information gaps relating to reporting <sup>b</sup> | Comments  |
|                      | Se   | ectoral report: Table 1      |                           | ✓    | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | <b>✓</b> | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        |   |   |
|                      |      | Table 1.A(a)                 |                           | ✓    | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | <b>✓</b> | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        |   |   |
|                      |      | Table 1.A(b)                 |                           | ✓    | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | >        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓   |   |
| Energy               | F    | Table 1.A(c)                 |                           | ✓    | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓   |   |
| Ene                  | SBDT | Table 1.A(d)                 |                           | ✓    | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        |   |   |
|                      | V.   | Table 1.B.1                  |                           | ✓    | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | <b>✓</b> | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        |   |   |
|                      |      | Table 1.B.2                  |                           | ✓    | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | <b>✓</b> | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓   |   |
|                      |      | Table 1.C                    |                           | ✓    | ✓        | ✓        | ✓        | ✓        | <b>✓</b> | ✓        | ✓        | ✓        | ✓        | ✓        | <b>✓</b> | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        |   |   |
|                      |      | Table 2(I)                   |                           | ✓    | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        |   |   |
|                      | Se   | ectoral reports: Table 2(II) |                           | ✓    | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        |   |   |
| ses                  |      | Table 2(I).A-G               |                           | ✓    | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        |   |   |
| səco                 |      | Table 2(II).C                |                           | ✓    | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        |   |   |
| pro                  |      | Table 2(II).E                |                           | ✓    | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        |   |   |
| Industrial processes | SRDT | Table 2(II).F                |                           | ✓    | <b>✓</b> | <b>✓</b> | <b>✓</b> | <b>✓</b> | <b>✓</b> | <b>√</b> | <b>√</b> | <b>√</b> | <b>✓</b> | <b>√</b> | <b>✓</b> | <b>✓</b> | <b>✓</b> | <b>✓</b> | <b>√</b> | <b>✓</b> | <b>√</b> |   | No numerical data<br>are reported in this<br>table, but for years<br>1990–1993 notation<br>keys NO, NA, NE<br>are used. |
|                      | Se   | ectoral report: Table 3      |                           | ✓    | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        |   |   |
| Solvent              | SBDT | Table 3.A–D                  |                           | ✓    | <b>✓</b> | ✓        | <b>✓</b> | <b>√</b> | ✓        | ✓        | ✓        | <b>√</b> | <b>✓</b> | ✓        | ✓        | <b>✓</b> | <b>√</b> | ✓        | ✓        | <b>√</b> | <b>✓</b> |   |   |

|             |      |                         |                           |          |          | Pro      | vision         | of com   | ımon r   | enorti   |          | ART I    |          | r vear   | s renoi  | ted (c   | ontinu   | ed)      |          |          |             |   |  |
|-------------|------|-------------------------|---------------------------|----------|----------|----------|----------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-------------|---|--|
|             |      |                         | 1                         |          |          | 110      | <b>VISIOII</b> | or com   | mon i    | cporti   |          | Years    | DICS IO  | i year   | этсрог   | ica (c   | Jiidiid  | cu)      |          |          |             |   |  |
|             |      |                         | Base<br>year <sup>a</sup> | 1990     | 1991     | 1992     | 1993           | 1994     | 1995     | 1996     | 1997     | 1998     | 1999     | 2000     | 2001     | 2002     | 2003     | 2004     | 2005     | 2006     | 2007        | Information<br>gaps relating<br>to reporting <sup>b</sup> | Comments   |
|             | Se   | ectoral report: Table 4 |                           | ✓        | ✓        | ✓        | ✓              | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓           |   |  |
|             |      | Table 4.A               |                           | ✓        | ✓        | ✓        | ✓              | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | <b>\</b>    |   |  |
|             |      | Table 4.B(a)            |                           | ✓        | ✓        | ✓        | ✓              | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | >           |   |  |
| Agriculture |      | Table 4.B(b)            |                           | <b>✓</b> | ✓        | ✓        | ✓              | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | <b>✓</b> | <b>✓</b> | ✓        | ✓        | >           | ✓   |  |
| cul         | SBDT | Table 4.C               |                           | ✓        | ✓        | ✓        | ✓              | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | <b>\</b>    |   |  |
| \gri        | SB   | Table 4.D               |                           | ✓        | ✓        | ✓        | ✓              | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓           |   |  |
| 7           |      | Table 4.E               |                           | ✓        | ✓        | ✓        | ✓              | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓           |   | No numerical data are  |
|             |      | Table 4.F               |                           | <b>✓</b> | ✓        | ✓        | ✓              | <b>✓</b> | <b>✓</b> | ✓        | ✓        | <b>✓</b> | ✓        | ✓        | ✓        | <b>✓</b> | <b>✓</b> | <b>✓</b> | <b>✓</b> | ✓        | <b>&gt;</b> |   | reported in these<br>tables, but notation<br>keys NO, NE are used.         |
|             | Se   | ectoral report: Table 5 |                           | ✓        | ✓        | ✓        | ✓              | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓           |   |  |
|             |      | Table 5.A               |                           | ✓        | ✓        | ✓        | ✓              | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓           |   |  |
|             |      | Table 5.B               |                           | ✓        | ✓        | ✓        | ✓              | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓           |   |  |
|             |      | Table 5.C               |                           | ✓        | ✓        | ✓        | ✓              | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓           |   |  |
|             |      | Table 5.D               |                           | ✓        | ✓        | ✓        | ✓              | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓           |   | No numerical data are  |
|             |      | Table 5.E               |                           | ✓        | ✓        | ✓        | ✓              | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓           |   | reported in these<br>tables, but for years                                 |
|             |      | Table 5.F               |                           | ✓        | ✓        | ✓        | ✓              | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | <b>✓</b> | ✓        | ✓        | ✓        | ✓           |   | 1990–2007 notation<br>key NE is used.                                      |
| LULUCF      | SBDT | Table 5 (I)             |                           | <b>✓</b> | ~        | ~        | <b>√</b>       | ~        | ~        | <b>√</b> | <b>✓</b> | <b>✓</b> | ~        | <b>√</b> | ~        | <b>✓</b> | <b>✓</b> | <b>✓</b> | <b>√</b> | <b>√</b> | ✓           |   | No numerical data are reported in this table, but notation key IE is used. |
|             |      | Table 5 (II)            |                           | ~        | ~        | ~        | <b>✓</b>       | ~        | ~        | <b>✓</b> | <b>✓</b> | ~        | ~        | <b>✓</b> | ~        | <b>✓</b> | <b>✓</b> | ~        | <b>✓</b> | ~        | <b>√</b>    |   | No numerical data are reported in this table, but notation key NE is used. |
|             |      | Table 5 (III)           |                           | <b>✓</b> | <b>✓</b> | <b>✓</b> | <b>✓</b>       | <b>✓</b> | <b>✓</b> | <b>✓</b> | <b>✓</b> | <b>✓</b> | <b>✓</b> | <b>√</b> | <b>✓</b> | <b>✓</b> | ✓        | <b>✓</b> | <b>✓</b> | ✓        | <b>√</b>    |   | No numerical data are reported in this table, but notation key NO is used. |
|             |      | Table 5 (IV)            |                           | ✓        | ✓        | ✓        | ✓              | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓           |   |  |
|             |      | Table 5 (V)             |                           | ✓        | ✓        | ✓        | ✓              | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓           |   |  |

|           |      |                             | -                         |      |      | Pro  | vision | of com | ımon r | eporti |      | ART I |      | or year | rs repo | rted ( | contin | ued) |      |      |      |   |          |
|-----------|------|-----------------------------|---------------------------|------|------|------|--------|--------|--------|--------|------|-------|------|---------|---------|--------|--------|------|------|------|------|---|----------|
|           |      |                             |                           |      |      |      |        |        |        |        |      | Years |      |         |         |        |        |      |      |      |      |   |          |
|           |      |                             | Base<br>year <sup>a</sup> | 1990 | 1991 | 1992 | 1993   | 1994   | 2661   | 9661   | 1661 | 8661  | 1999 | 2000    | 2001    | 2002   | 2003   | 2004 | 2002 | 2006 | 2007 | Information<br>gaps relating to<br>reporting <sup>b</sup> | Comments |
|           | Se   | ctoral report: Table 5 (KP) |                           |      |      |      |        |        |        |        |      |       |      |         |         |        |        |      |      |      |      |   |          |
|           |      | Table 5 (KP-I) A.1.1        |                           |      |      |      |        |        |        |        |      |       |      |         |         |        |        |      |      |      |      |   |          |
|           |      | Table 5 (KP-I )A.1.2        |                           |      |      |      |        |        |        |        |      |       |      |         |         |        |        |      |      |      |      |   |          |
|           |      | Table 5 (KP-I) A.1.3        |                           |      |      |      |        |        |        |        |      |       |      |         |         |        |        |      |      |      |      |   |          |
|           |      | Table 5 (KP-I) A.2          |                           |      |      |      |        |        |        |        |      |       |      |         |         |        |        |      |      |      |      |   |          |
|           |      | Table 5 (KP-I) A.2.1        |                           |      |      |      |        |        |        |        |      |       |      |         |         |        |        |      |      |      |      |   |          |
| F.        |      | Table 5 (KP-I) B.1          |                           |      |      |      |        |        |        |        |      |       |      |         |         |        |        |      |      |      |      |   |          |
| 'n        | L    | Table 5 (KP-I) B.2          |                           |      |      |      |        |        |        |        |      |       |      |         |         |        |        |      |      |      |      |   |          |
| Ιή        | SBDT | Table 5 (KP-I) B.3          |                           |      |      |      |        |        |        |        |      |       |      |         |         |        |        |      |      |      |      |   |          |
| KP-LULUCF |      | Table 5 (KP-I) B.4          |                           |      |      |      |        |        |        |        |      |       |      |         |         |        |        |      |      |      |      |   |          |
| ×         |      | Table 5 (KP-II) 1           |                           |      |      |      |        |        |        |        |      |       |      |         |         |        |        |      |      |      |      |   |          |
|           |      | Table 5 (KP-II) 2           |                           |      |      |      |        |        |        |        |      |       |      |         |         |        |        |      |      |      |      |   |          |
|           |      | Table 5 (KP-II) 3           |                           |      |      |      |        |        |        |        |      |       |      |         |         |        |        |      |      |      |      |   |          |
|           |      | Table 5 (KP-II) 4           |                           |      |      |      |        |        |        |        |      |       |      |         |         |        |        |      |      |      |      |   |          |
|           |      | Table 5 (KP-II) 5           |                           |      |      |      |        |        |        |        |      |       |      |         |         |        |        |      |      |      |      |   |          |
|           | Ac   | counting table              |                           |      |      |      |        |        |        |        |      |       |      |         |         |        |        |      |      |      |      |   |          |

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|------------------|------|--|---------------------------|----------|------|------|---------|--------|----------|----------|---------------|----------|----------|--------|----------|----------|----------|----------|----------|----------|----------|---|---|
|                  |      |  | 1                         |          |      | 110  | V151011 | or com | 1110111  | cpor ti  |               | Years    |          | years  | терог    | ica (c   | Ollulla  | cu)      |          |          |          | I   |   |
|                  |      |  | Base<br>year <sup>a</sup> | 1990     | 1991 | 1992 | 1993    | 1994   | 1995     | 1996     | 1997          | 1998     | 1999     | 2000   | 2001     | 2002     | 2003     | 2004     | 2005     | 2006     | 2007     | Information<br>gaps relating<br>to reporting <sup>b</sup> | Comments  |
|                  | Se   | ctoral report: Table 6                               |                           | ✓        | ✓    | ✓    | ✓       | ✓      | ✓        | ✓        | ✓             | ✓        | ✓        | ✓      | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        |   |   |
|                  |      | Table 6.A  |                           | ✓        | ✓    | ✓    | ✓       | ✓      | ✓        | ✓        | ✓             | ✓        | ✓        | ✓      | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        |   |   |
| ste              | L    | Table 6.B  |                           | ✓        | ✓    | ✓    | ✓       | ✓      | ✓        | ✓        | ✓             | ✓        | ✓        | ✓      | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        |   |   |
| Waste            | SBDT | Table 6.C  |                           | <b>√</b> | ✓    | ✓    | ✓       | ✓      | <b>✓</b> | <b>✓</b> | <b>✓</b>      | <b>√</b> | <b>✓</b> | ✓      | <b>✓</b> | <b>✓</b> | <b>✓</b> | <b>✓</b> | <b>√</b> | <b>✓</b> | <b>√</b> |   | No numerical data<br>are reported in this<br>table, but notation<br>key IE is used. |
|                  |      | Summary 1.A  |                           | ✓        | ✓    | ✓    | ✓       | ✓      | ✓        | ✓        | ✓             | ✓        | ✓        | ✓      | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        |   |   |
|                  |      | Summary 1.B  |                           | ✓        | ✓    | ✓    | ✓       | ✓      | ✓        | ✓        | ✓             | ✓        | ✓        | ✓      | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        |   |   |
| ples             |      | Summary 2 (CO <sub>2</sub> equivalent emissions)     |                           | ✓        | ✓    | ✓    | ✓       | ✓      | ✓        | ✓        | ✓             | ✓        | ✓        | ✓      | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        |   |   |
| and other tables |      | Summary 3 (Methods/emission factors)                 |                           | <b>\</b> | ✓    | ✓    | ✓       | ✓      | ✓        | ✓        | ✓             | <b>✓</b> | ✓        | ✓      | ✓        | ✓        | ✓        | ✓        | <b>✓</b> | ✓        | ✓        |   |   |
| l ot             | DT   | Table 7 (Key categories)                             |                           | <b>\</b> |      |      |         |        |          |          |               |          |          |        |          |          |          |          |          | ✓        | ✓        |   |   |
|                  | SBDT | Table 8(a) (Recalculation – recalculated data)       |                           | <b>✓</b> | ✓    | ✓    | ✓       | ✓      | ✓        | ✓        | ✓             | ✓        | ✓        | ✓      | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        |          |   |   |
| Summary          |      | Table 8(b) (Recalculation – explanatory information) |                           |          |      |      |         |        |          |          |               |          |          |        |          |          |          |          |          |          |          |   |   |
| Su               |      | Table 9(a) (Completeness)                            |                           | ✓        | ✓    | ✓    | ✓       | ✓      | ✓        | ✓        | ✓             | ✓        | ✓        | ✓      | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓   |   |
|                  |      | Table 9(b) (Completeness)                            |                           |          |      |      |         |        |          |          |               |          |          |        |          |          |          |          |          |          |          |   |   |
|                  |      | Table 10 (Trends)                                    |                           | ✓        | ✓    | ✓    | ✓       | ✓      | ✓        | ✓        | ✓             | ✓        | ✓        | ✓      | ✓        | ✓        | ✓        | ✓        | ✓        | <b>√</b> | ✓        |   |   |

<sup>&</sup>lt;sup>a</sup> Parties included in Annex I to the Convention undergoing the process of transition to a market economy are allowed to use a base year or a period of years other than 1990, in accordance with the provisions of Article 4, paragraph 6, of the Convention and decisions 9/CP.2 and 11/CP.4.

b This column indicates that reporting gaps (blank cells) have been identified in a given table of the CRF. This was owing to limited use, or lack, of notation keys (NO, NE, NA, IE, C).
c Parties are required to report anthropogenic GHG emissions by sources and removals by sinks from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol, and, if any, elected activities This column indicates that reporting gaps (blank cells) have been identified in a given table of the CRF. This was owing to limited use, or lack, of notation keys (NO, NE, NA, IE, C).

Parties are required to report anthropogenic GHG emissions by sources and removals by sinks from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol, and, if any, elected activities under Article 3, paragraph 4, using the agreed CRF tables adopted under decision 6/CMP.3. Parties are required to report these tables on a mandatory basis commencing with the 2010 submission; however, they may elect to report these tables on a voluntary basis before this submission. Parties may also elect to report these tables for the base year or 1990.

|                                      |                    | Provision o                      | PART III<br>of information relating to 1 | recalculations |                         |       |  |  |
|--------------------------------------|--------------------|----------------------------------|--|----------------|-------------------------|-------|--|--|
| Table 8(a) (Recalculated data)       | ✓                  | Comments                         |  |                |                         |       |  |  |
| Recalculation reported for years     | 1990–2006          |                                  |  |                |                         |       |  |  |
| Recalculated sectors/gases           | Energy             | Industrial processes             | Solvent and other product use            | Agriculture    | LULUCF                  | Waste |  |  |
| $CO_2$                               | ✓                  | ✓                                |  |                | ✓                       |       |  |  |
| CH <sub>4</sub>                      | ✓                  |                                  |  | ✓              |                         | ✓     |  |  |
| $N_2O$                               | ✓                  |                                  |  | ✓              |                         |       |  |  |
| HFCs                                 |                    | ✓                                |  |                |                         |       |  |  |
| PFCs                                 |                    |                                  |  |                |                         |       |  |  |
| SF <sub>6</sub>                      |                    | ✓                                |  |                |                         |       |  |  |
| Table 8(b) (Explanatory information) |                    |                                  |  |                |                         |       |  |  |
| Percentage difference in aggrega     | ate greenhouse gas | base year estimate: <sup>a</sup> | with LULUCF:                             | -4.19 %        | without LULUCF: -0.21 % |       |  |  |
| emission                             |                    | latest recalculated year:b       | without LULUCF:                          | ULUCF: -0.2 %  |                         |       |  |  |

<sup>&</sup>lt;sup>a</sup> Parties included in Annex I to the Convention undergoing the process of transition to a market economy are allowed to use a base year or a period of years other than 1990, in accordance with the provisions of Article 4, paragraph 6, of the Convention and decisions 9/CP.2 and 11/CP.4.

<sup>b</sup> The latest recalculated year is the submission year minus 3.

| PART IV  |                                |          |
|--|--------------------------------|----------|
| Provision of information relating to KP-LULUCF activities under Article 3, pa  | aragraphs 3 and 4 <sup>a</sup> |          |
|  | Provided                       | Comments |
| Emissions by sources and removals by sinks are clearly distinguished from emissions from categories included in Annex A to the Kyoto Protocol.   |                                |          |
| Information on how inventory methodologies have been applied taking into account IPCC good practice guidance for LULUCF <sup>b</sup> and decision 16/CMP.1.  | r                              |          |
| Information on geographical location of the boundaries of areas that encompass:  |                                |          |
| Units of land subject to activities under Article 3.3  |                                |          |
| Units of land subject to activities under Article 3.3, which would otherwise be included in land subject to elected activiunder Article 3.4  | ties                           |          |
| Land subject to elected activities under Article 3.4   |                                |          |
| Information on the spatial assessment unit for determining the area of accounting for afforestation, reforestation an deforestation.   | d                              |          |
| Units of land subject to activities under Article 3.3  Units of land subject to activities under Article 3.3, which would otherwise be included in land subject to elected activi under Article 3.4  Land subject to elected activities under Article 3.4  Information on the spatial assessment unit for determining the area of accounting for afforestation, reforestation and deforestation.  Information on GHG emissions/removals resulting from activities under Article 3.3 and 3.4, for all geographical locations reported in the current and previous years since the beginning of the commitment period or the onset of the activity, whichever comes later.  Information on carbon pools (above-ground / below-ground biomass, litter, dead wood and soil organic carbon) that not accounted for.  Information on anthropogenic GHGs from LULUCF activities under Article 3.3 and 3.4 factoring out removals from Elevated CO <sub>2</sub> concentrations above pre-industrial levels  Indirect nitrogen deposition  The dynamic effects of age structure resulting from activities prior to 1 January 1990  Specific information to be reported for Article 3.3 activities:  Activities under Article 3.3 that began on or after 1 January 1990 and before 31 December of the last year of the commitment period  How harvesting or forest disturbance that is followed by the re-establishment of forest is distinguished from deforestation these units of land since 1990  Specific information to be reported for Article 3.4 activities:  Activities under Article 3.4 that occurred since 1 January 1990 and are human induced  Cropland management, grazing land management, revegetation: emissions/removals reported for each year of the |                                |          |
| Information on carbon pools (above-ground / below-ground biomass, litter, dead wood and soil organic carbon) that not accounted for.   | are                            |          |
| Information on anthropogenic GHGs from LULUCF activities under Article 3.3 and 3.4 factoring out removals from   | n:                             |          |
| Elevated CO <sub>2</sub> concentrations above pre-industrial levels  |                                |          |
| Indirect nitrogen deposition   |                                |          |
| The dynamic effects of age structure resulting from activities prior to 1 January 1990   |                                |          |
| Specific information to be reported for Article 3.3 activities:  |                                |          |
| Activities under Article 3.3 that began on or after 1 January 1990 and before 31 December of the last year of the commitment period  |                                |          |
| How harvesting or forest disturbance that is followed by the re-establishment of forest is distinguished from deforestation  | on                             |          |
| Emissions/removals from lands harvested during the first commitment period following afforestation and reforestation   | on                             |          |
| these units of land since 1990   |                                |          |
| Specific information to be reported for Article 3.4 activities:  |                                |          |
| Activities under Article 3.4 that occurred since 1 January 1990 and are human induced  |                                |          |
|  |                                |          |
| commitment period and for the base year for each of the elected activities on the geographical locations reported  |                                |          |
| Emissions/removals from Article 3.4 activities that are not accounted for under activities under Article 3.3   |                                |          |
| Forest management: information on the extent to which GHG removals by sinks offsets the debit incurred under Article   | 3.3                            |          |

<sup>&</sup>lt;sup>a</sup> Parties are required to report anthropogenic GHG emissions by sources and removals by sinks from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol, and, if any, elected activities under Article 3, paragraph 4, using the agreed CRF tables adopted under decision 6/CMP.3. Parties are required to report these tables on a mandatory basis commencing with the 2010 submission; however, they may elect to report these tables on a voluntary basis before this submission. Parties may also elect to report these tables for the base year or 1990.

b The Intergovernmental Panel on Climate Change Good Practice Guidance for Land Use, Land-Use Change and Forestry.