



COOMET Program

**Program of Joint CRM Production
within COOMET**

COOMET P5/2014

**PROGRAMME
OF JOINT CRM PRODUCTION
WITHIN COOMET
(PROJECT No. 186/RU/99)**

As of 01 June 2014

Ind. NN	Country, CRM producer, contact person	Project	Certified characteristics	Planned values (range) of certified characteristics	Period of CRM development	Notes
1	2	3	4	5	6	7
<i>Part 1 (projects for which the forms of Proposed (P) or Agreed (A) Projects are prepared)</i>						
1.	<p>Russia All-Russian Research Institute for Petroleum Refining (OAO “VNII NP”) Moscow</p> <p>Contact Person: Irina V. Tereshina Head of Metrological Research Laboratory Tel:(495)788-1553, 787-48-87, ext.1367 E-mail: metrology@vniinp.ru</p> <p>Scientific and Production Association “INTEGRSO” Ufa Anvar H. Muhamedzyanov General Director Tel. (347) 275-31-38 (347) 270-86-13, 8-901-813-75-29 E-mail: integrso@mail.ru</p> <p>FGUP “UNIIM“ Ekaterinburg Head of Department Elena V. Osintseva Tel.: (343) 359-60-68 E-mail: ev_osinceva@mail.ru</p>	<p>Development of CRMs of volume (mass) fraction of oxygenates in petrol: (3 types): CRM OMD OKG -1; CRM OMD OKG -2; CRM OMD OKG-3 <u>358/RU/06 (A)</u></p>	<p>CRM OMD OKG -1: Volume (mass) fraction, % ethanol isopropanol Mass fraction of organically bound oxygen, %</p> <p>CRM OMD OKG -2: Volume (mass) fraction of MTBE, % Mass fraction of organically bound oxygen, %</p> <p>CRM OMD OKG -3: Volume (mass) fraction, % ethanol isopropanol MTBE Mass fraction of organically bound oxygen, %</p>	<p>0,10-0,30 0,10-0,30 0,10-0,20 1,0-3,0 0,2-0,6 0,5-1,5 2,0-4,0 4,0-6,0 2,0-3,0</p>	2011-2015	<p>Participants of work: 1. Belarus -202 chemmological fuel centre at the RB Ministry of Defense; -PO “NAPHTAN” 2. Moldova -Standardization and Metrology Service of Republic of Moldova</p>

1	2	3	4	5	6	7
2.	<p style="text-align: center;">Russia West-Siberian Testing Centre (OAO “WSTCentre”), 9, Ordzhonikidze Str., Novokuznetsk Kemerovo Province 654006 Tatiana N. Voropaeva Deputy Gen. Director Tel.: (8-3843) 74-57-22 Fax: (8-3843) 74-39-76</p> <p style="text-align: center;">Contact Person: Elena Y. Tsukanova Leading Specialist Tel.: (8-3843) 74-56-34 E-mail: mineralog.mail.ru</p>	<p>Development of CRMs for composition of ilmenite concentrate (SO-35)</p> <p><u>418 /RU/08 (A)</u></p>	<p>Mass fraction of components, %</p> <p>Silicon oxide</p> <p>Titanium oxide</p> <p>Aluminium oxide</p> <p>Total iron</p> <p>Iron protoxide</p> <p>Manganese oxide</p> <p>Calcium oxide</p> <p>Magnesium oxide</p> <p>Phosphor oxide</p> <p>Chromium oxide</p> <p>Zirconium oxide</p> <p>Vanadium oxide</p> <p>Scandium</p> <p>Lead</p> <p>Zinc</p> <p>Copper</p> <p>Barium</p>	<p>1,00-5,00</p> <p>50,00-70,00</p> <p>0,50-2,00</p> <p>20,00-30,00</p> <p>20,00-30,00</p> <p>0,50-2,00</p> <p>0,50-2,00</p> <p>0,10-1,00</p> <p>0,50-2,00</p> <p>0,5-2,50</p> <p>1,00-5,00</p> <p>0,036-0,18</p> <p>0,001-0,005</p> <p>0,01-0,15</p> <p>0,01-0,05</p> <p>0,001-0,005</p> <p>0,01-0,05</p>	<p>2008–2015</p>	<p>Participants of work:</p> <p>1. Belarus - Central laboratory of RUP “Belgeologia” branch; - BelGIM</p> <p>2. Kazakhstan - Aksusk Ferroalloy Works - JSC «Kazchrom”, Central Laboratory - DGP “VNIITSVETMET” - Riddersk Ore-dressing Complex “Kazzinc Ltd.” - “Centrgeoanalyte, Ltd”</p> <p>3. Kyrgyzstan - CL of the State Geology and Mineral Resources Agency under the Government of Kyrgyz Rep.</p> <p>4. Ukraine -Centre of Certification Tests of Non-ferrous Metals, CRMs and Measurement Assurance of Analytical Control, State Research and Design Institute of Titanium</p>

1	2	3	4	5	6	7
3.	<p style="text-align: center;">Russia West-Siberian Testing Centre (OAO ‘WSTCentre’), 9, Ordzhonikidze Str., Novokuznetsk Kemerovo Province 654006 Tatiana N. Voropaeva Deputy Gen. Director E-mail: zsic@mail.ru Tel.: (8-3843) 74-57-22 Fax: (8-3843) 74-39-76</p> <p style="text-align: center;">Contact Person: Elena Y. Tsukanova Leading Specialist Tel.: (8-3843)-74 56-34 E-mail: mineralog.mail.ru</p>	<p>Development of CRMs for composition of zirconium concentrate (SO-36)</p> <p><u>466/RU/09 (A)</u></p>	<p>Mass fraction, % Silicon oxide Titanium oxide Aluminium oxide Iron tot.. Manganese oxide Calcium oxide Magnesium oxide Phosphor oxide Chromium oxide Zirconium oxide Vanadium oxide Tin Scandium Yttrium Lanthanum Barium Beryllium Hafnium</p>	<p>20,0-30,0 20,0-30,0 0,05-0,10 0,1-0,5 0,01-0,10 0,10-0,50 0,05-0,50 0,10-1,00 0,05-0,50 40,0-50,0 0,01-0,05 0,01-0,05 0,001-0,005 0,01-0,1 0,001-0,01 0,01-0,05 0,0001-0,0005 0,01-0,05</p>	<p>2009–2015</p>	<p>Participants of work:</p> <p>1. Belarus - Central laboratory of RUP “Belgeologia” branch; - BelGIM</p> <p>2. Kazakhstan - “Centrgeoanalyte, Ltd” - DGP “VNIITSVETMET”</p> <p>3. Kyrgyzstan - CL of the State Geology and Mineral Resources Agency under the Government of Kyrgyz Rep.</p> <p>4. Ukraine - Centre of Certification Tests of Non-ferrous Metals, CRMs and Measurement Assurance of Analytical Control, State Research and Design Institute of Titanium; - Testing Centre “A.S. Berezhnoy UkrNIIO”</p>

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4.	<p>Russia All-Russian Research Institute for Petroleum Refining (OAO "VNII NP") Moscow Contact Person: Irina V. Tereshina Head of Metrological Research Laboratory Tel:(495)788-1553, 787-48-87, ext.1367 E-mail: metrology@vniinp.ru</p> <p>Scientific and Production Association "INTEGRSO" Ufa Anvar H. Muhamedzyanov General Director Tel. (347) 275-31-38 (347) 270-86-13, 8-901-813-75-29 E-mail: integrso@mail.ru</p>	<p>Development of CRMs of calcium and zinc content in oils (3 types): CRM MDKC – 1; CRM MDKC – 2; CRM MDKC – 3</p> <p><u>521/RU/11 (P)</u></p>	<p>Mass fraction, %</p> <p>CRM MDKC – 1: Ca 0,10 – 0,20 Zn 0,10 – 0,15</p> <p>CRM MDKC – 2: Ca 0,20 – 0,30 Zn 0,05 – 0,10</p> <p>CRM MDKC – 3: Ca 0,30 – 0,40 Zn 0,07 – 0,12</p>		2011–2015	<p>Participants of work:</p> <p>1. Belarus - OJSC "Mozyr Petroleum Processing Plant" - OJSC "Naphtan"</p> <p>2. Kazakhstan - "Centrgeoanalyte, Ltd"</p> <p>3. Ukraine -The Centre of Certification Tests, State Research and Design Institute of Titanium.</p>
5.	<p>Russia All-Russian Research Institute for Petroleum Refining (OAO "VNII NP") Moscow Contact Person: Irina V. Tereshina Head of Metrological Research Laboratory Tel:(495)788-1553, 787-48-87, ext.1367 E-mail: metrology@vniinp.ru</p> <p>Scientific and Production Association "INTEGRSO" Ufa Anvar H. Muhamedzyanov General Director Tel. (347) 275-31-38 (347) 270-86-13, 8-901-813-75-29 E-mail: integrso@mail.ru</p>	<p>Development of CRMs for sulphur microimpurities content in petroleum products</p> <p><u>536/UA/11 (P)</u></p>	<p>Mass fraction of sulphur microimpurities, %</p> <p>CRM MDMS -1 CRM MDMS -2 CRM MDMS -3 CRM MDMS -4 CRM MDMS -5</p>	<p>0,0000 – 0,0005 0,0005 – 0,0020 0,0020 – 0,010 0,010 – 0,020 0,020 – 0,040</p>	2011–2015	<p>Participants of work:</p> <p>1. Belarus -PO "Naphtan"; - OJSC „Mozyr Petroleum Processing Plant“</p> <p>2. Kazakhstan - D. Serikbaev East-Kazakhstan GTU on certification tests of motor fuel and oil "SATandM"; - JSC „KazMunaiGas Onimderly“; - "Neftechem Company LTD" - West-Kazakhstan JSC " NaTsEkS"</p> <p>3.Lithuania -State Scientific and Research Centre of Physical and Technological Sciences</p> <p>4. Ukraine - OJSC NPK " NPK-Galichina"; -IP „SZHS Ukraine“</p>

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6.	<p style="text-align: center;">Russia</p> <p style="text-align: center;">All-Russian Research Institute for Petroleum Refining (OAO "VNII NP") Moscow</p> <p style="text-align: center;">Contact Person: Irina V. Tereshina Head of Metrological Research Laboratory Tel:(495)788-1553, 787-48-87, ext.1367 E-mail: metrology@vniinp.ru</p> <p style="text-align: center;">Scientific and Production Association "INTEGRSO" Ufa Anvar H. Muhamedzyanov General Director Tel. (347) 275-31-38 (347) 270-86-13, 8-901-813-75-29 E-mail: integrso@mail.ru</p>	<p>Development of CRMs of ultimate temperature of diesel fuel filterability on a cold filter (2 types)</p> <p><u>537/UA/11 (P)</u></p>	<p>Ultimate temperature of filterability on a cold filter, °C</p> <p style="text-align: center;">CRM PTF DT -1 CRM PTF DT -2</p>	<p style="text-align: center;">0 – minus 20° C minus 20 – minus 40° C</p>	<p style="text-align: center;">2011–2015</p>	<p>Participants of work:</p> <p>1. Belarus -PO "Naphtan"; - OJSC „Mozyr Petroleum Processing Plant“;</p> <p>2. Kazakhstan West-Kazakhstan JSC “ NaTsEkS“</p> <p>3. Ukraine - OJSC NPK “ NPK-Galichina“;</p>
7.	<p style="text-align: center;">Contact Person: Irina V. Tereshina Head of Metrological Research Laboratory Tel:(495)788-1553, 787-48-87, ext.1367 E-mail: metrology@vniinp.ru</p> <p style="text-align: center;">Scientific and Production Association "INTEGRSO" Ufa Anvar H. Muhamedzyanov General Director Tel. (347) 275-31-38 (347) 270-86-13, 8-901-813-75-29 E-mail: integrso@mail.ru</p>	<p>Development of CRMs of lead concentration in motor petrol (4 types)</p> <p><u>538/RU/11 (P)</u></p>	<p>Lead concentration, mg/dm³</p> <p style="text-align: center;">CRM KSB-1 CRM KSB-2 CRM KSB-3 CRM KSB-4</p>	<p style="text-align: center;">0 - 0,1; 2,0 - 3,0; 4,0 - 7,0; 8,0 - 10,0.</p>	<p style="text-align: center;">2011-2015</p>	<p>Participants of work:</p> <p>1. Belarus - PO "Naphtan" - OJSC „Mozyr Petroleum Processing Plant“</p> <p>2. Kazakhstan - JSC „KazMunaiGas Onimderly“;</p> <p>3. Lithuania -State Scientific and Research Centre of Physical and Technological Sciences</p> <p>4. Ukraine - OJSC NPK “ NPK-Galichina“;</p>
8.	<p style="text-align: center;">Tel. (347) 275-31-38 (347) 270-86-13, 8-901-813-75-29 E-mail: integrso@mail.ru</p>	<p>Development of CRMs of iron concentration in motor petrol (4 types)</p> <p><u>539/RU/11 (P)</u></p>	<p>Mass concentration of iron, mg/dm³</p> <p style="text-align: center;">CRM MKJ-1 CRM MKJ-2 CRM MKJ-3 CRM MKJ-4</p>	<p style="text-align: center;">0 - 3; 3 - 8; 8 - 15; 15 - 25.</p>	<p style="text-align: center;">2011-2015</p>	<p>Participants of work:</p> <p>1. Belarus - PO "Naphtan" - OJSC „Mozyr Petroleum Processing Plant“</p> <p>2. Lithuania -State Scientific and Research Centre of Physical and Technological Sciences</p> <p>3. Ukraine - OJSC NPK “ NPK-Galichina“;</p>

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9.	<p>Russia Federal State Budgetary Enterprise of Science A.P. Vinogradov Geochemistry Institute Siberian Branch of Russian Academy of Sciences</p> <p>1a, Favorsky str. Irkutsk, 664033</p> <p>Contact Person: Irina E. Vasilieva Head of Laboratory of Optical Spectral Analysis and Reference Materials E-mail: vasira@igc.irk.ru Tel./fax: +7 (3952) 42 58 37 Mob.: +7 964 226 4811</p>	<p>Development of CRM for composition of wolframite hubnerite concentrate (hard- alloy) – KVG(T)</p> <p>617/RU/13 (P)</p>	<p>Mass fraction of elements, %</p> <p>Tungsten Manganese Aluminium Beryllium Vanadium Bismuth Iron Gold Yttrium Cadmium Calcium Silicon Copper Molybdenum Arsenic Niobium Tin Lead Sulphur Silver Scandium Antimony Titanium Uranium Phosphor Fluoride Zinc Zirconium</p> <p><i>Note: Elements in bold are of the main interest during certification</i></p>	<p>45 – 50 10 – 12 0,7 – 1,0 0,0007 – 0,002 0,01 – 0,05 0,006 – 0,009 7,0 – 8,0 0,0005 – 0,003 0,002 – 0,005 0,001 – 0,0001 1,5 – 2,5 1,8 – 2,2 0,004 – 0,007 0,0015 – 0,003 0,00007 – 0,0007 0,02 – 0,10 0,02 – 0,04 0,06 – 0,08 0,15 – 0,20 0,0004 – 0,001 0,007 – 0,05 0,0001 – 0,003 3,3 – 4,0 0,001 – 0,003 0,001 – 0,05 0,3 – 0,4 0,015 – 0,025 0,007 – 0,03</p>	2013-2015	<p>Participants of work:</p> <p>1. Belarus 2. Bulgaria GEOLAB Analytical Laboratory of Geological Institute BAN 3. Kazakhstan - “Centrgeoanalyte, Ltd” - Riddersk mining and processing complex “Kazzinc, Ltd” - Central Chemical Laboratory of Balkhash region “Kazakhmys Corporation, Ltd.” 4. Uzbekistan GP “Central Laboratory” of State Committee of Geology and Mineral Resources</p>

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10.	<p>Ukraine State Enterprise “State Research and Design Institute of Titanium” 180 Lenin pr., Zaporozhe, Ukraine, 69035</p> <p>Contact Person: Alexey D. Suschinsky, Deputy General Director The Institute of Titanium Tel., (+38 061) 289-91-00 Fax (+38 061) 289-91-30 E-mail: nii@nii.timag.org</p> <p>NSC “Institute of Metrology” 42 Mironositskya str., Kharkov, 61002, Ukraine</p> <p>Contact Person: Andrey G. Ivkov, Leading Researcher Tel.: (+ 38 057) 704-97-45 Fax: (+ 38 057) 700-34-47, E-mail: standard@metrology.kharkov.ua E-mail: crm-ua@ukr.net</p>	<p>Development of CRM of Guinean and Guyanese bauxites composition for chemical and XRD analyses</p> <p><u>619/UA/13 (II)</u></p>	<p>Mass fraction of components , %</p> <p><i>Chemical composition:</i> Aluminium oxide Silicon dioxide Titanium dioxide Chromium oxide Iron (III) oxide total Manganese oxide Magnesium oxide Vanadium oxide Calcium oxide Gallium oxide Phosphorus oxide Sulphur Total carbon Carbon (IV) oxide Mass loss at calcination</p> <p><i>Phase composition:</i> Gibbsite Goethite Hematite Rutile Kaolinite Octahedrite</p>	<p>40-60 2-10 1-3 0,01-0,5 1-30 0,01-0,5 0,05-0,15 0,03-0,1 0,1-0,2 0,005-0,03 0,1-0,2 <i>less than 0,1</i> 0,1-0,5 0,05-0,5 20-30 50-70 10-20 10-20 1-5 10-20 10-20</p>	<p>2013-2015</p>	<p>Participants of work: 1. Belarus -BelGIM - Central laboratory of RUP “Belgeologia” branch; 2. Kazakhstan - “Centrgeoanalyte, Ltd” - “Topaz, Ltd” - JSC “Kazakhstan Aluminium” - JSK “Kazakhstan Electrolysis Plant” 3. Russia -OJSC “West-Siberian Testing Centre” (OJSC “WSTCentre”)</p>

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11.	<p>Ukraine State Enterprise “State Research and Design Institute of Titanium” 180 Lenin pr., Zaporozhe, Ukraine, 69035</p> <p>Contact Person: Alexey D. Suschinsky, Deputy General Director The Institute of Titanium Tel., (+38 061) 289-91-00 Fax (+38 061) 289-91-30 E-mail: nii@nii.timag.org</p> <p>NSC “Institute of Metrology” 42 Mironositskya str., Kharkov, 61002, Ukraine</p> <p>Contact Person: Andrey G. Ivkov, Leading Researcher Tel.: (+ 38 057) 704-97-45 Fax: (+ 38 057) 700-34-47, E-mail: standard@metrology.kharkov.ua E-mail: crm-ua@ukr.net</p>	<p>Development of CRMs of disthene- sillimanite concentrate composition for chemical and spectral analyses</p> <p><u>620/UA/13 (II)</u></p>	<p>Mass fraction of components , %</p> <p><i>For chemical analysis:</i> Aluminium oxide Iron (III) oxide Titanium (IV) oxide Magnesium oxide Calcium oxide</p> <p><i>For spectral analysis:</i> Iron (III) oxide Titanium oxide Magnesium oxide Calcium oxide</p>	<p>40-60 0,3-1,0 0,3-3,0 0,1-0,5 0,05-0,3</p> <p>0,3-1,0 0,3-3,0 0,1-0,5 0,05-0,3</p>	<p>2013-2015</p>	<p>Participants of work: 1. Belarus -BelGIM - Central laboratory of RUP “Belgeologia” branch; 2. Kazakhstan - “Centrgeoanalyte, Ltd” - “Topaz, Ltd” 3. Russia -OJSC “West-Siberian Testing Centre” (OJSC “WSTCentre”)</p>

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12.	<p>Ukraine Cattle Breeding Institute National Academy of Agrarian Sciences of Ukraine Kharkov 3 7th Guards Army str., Kulinichi, Kharkov region, Ukraine, 62404</p> <p>Contact Person: Sergey O. Shapovalov Deputy Director Kharkov Tel.: (+38 057) 740-33-03 Fax: (+38057) 740-39-94 E-mail: shapovalov73@rambler.ru</p> <p>NSC "Institute of Metrology" 42 Mironositskya str., Kharkov, 61002, Ukraine</p> <p>Contact Person: Andrey G. Ivkov, Leading Researcher Tel.: (+ 38 057) 704-97-45 Fax: (+ 38 057) 700-34-47, E-mail: standard@metrology.kharkov.ua E-mail: crm-ua@ukr.net</p>	<p>Development of CRM for composition of raw milk main components (set)</p> <p>632/UA/14 (II)</p>	<table border="1"> <tr> <td colspan="2" data-bbox="853 225 1205 403">Interval of permissible certified values for CRM types in a set</td> <td data-bbox="1205 225 1525 403">Limits of permissible values for errors of certified values at P=0,95</td> </tr> <tr> <td colspan="3" data-bbox="853 403 1525 448">Mass fraction of fat, %:</td> </tr> <tr> <td data-bbox="853 448 1205 485">F1</td> <td data-bbox="1205 448 1368 485">2,0-2,5</td> <td data-bbox="1368 448 1525 485" rowspan="7">± 0,06</td> </tr> <tr> <td data-bbox="853 485 1205 521">F2</td> <td data-bbox="1205 485 1368 521">2,6-3,0</td> </tr> <tr> <td data-bbox="853 521 1205 558">F3</td> <td data-bbox="1205 521 1368 558">3,1-3,5</td> </tr> <tr> <td data-bbox="853 558 1205 595">F4</td> <td data-bbox="1205 558 1368 595">3,6-4,0</td> </tr> <tr> <td data-bbox="853 595 1205 632">F5</td> <td data-bbox="1205 595 1368 632">4,1-4,5</td> </tr> <tr> <td data-bbox="853 632 1205 668">F6</td> <td data-bbox="1205 632 1368 668">4,6-5,0</td> </tr> <tr> <td data-bbox="853 668 1205 705">F7</td> <td data-bbox="1205 668 1368 705">5,1-5,5</td> </tr> <tr> <td colspan="3" data-bbox="853 705 1525 750">Mass fraction of total protein, %</td> </tr> <tr> <td data-bbox="853 750 1205 884">F1 F2 F3 F4</td> <td data-bbox="1205 750 1368 884">1,7-2,7</td> <td data-bbox="1368 750 1525 884">± 0,04</td> </tr> <tr> <td data-bbox="853 884 1205 978">F5 F6 F7</td> <td data-bbox="1205 884 1368 978">2,71-5,5</td> <td data-bbox="1368 884 1525 978">± 0,04</td> </tr> <tr> <td data-bbox="853 978 1205 1040">Mass fraction of protein (tru), %</td> <td data-bbox="1205 978 1368 1040">1,50-5,00</td> <td data-bbox="1368 978 1525 1040">± 0,03</td> </tr> <tr> <td data-bbox="853 1040 1205 1102">Mass fraction of lactose, %</td> <td data-bbox="1205 1040 1368 1102">4,00-5,50</td> <td data-bbox="1368 1040 1525 1102">± 0,12</td> </tr> <tr> <td data-bbox="853 1102 1205 1165">Mass fraction of dried skim milk residue, %</td> <td data-bbox="1205 1102 1368 1165">7,50-9,00</td> <td data-bbox="1368 1102 1525 1165">± 0,07</td> </tr> <tr> <td data-bbox="853 1165 1205 1227">Mass fraction of dry matter, %</td> <td data-bbox="1205 1165 1368 1227">9,00-16,00</td> <td data-bbox="1368 1165 1525 1227">± 0,08</td> </tr> <tr> <td data-bbox="853 1227 1205 1353">Freezing point, °C</td> <td data-bbox="1205 1227 1368 1353">minus 0,50 °C to minus 0,60 °C</td> <td data-bbox="1368 1227 1525 1353">± 0,01</td> </tr> <tr> <td data-bbox="853 1353 1205 1414">Number of somatic cells, ths/cm³</td> <td data-bbox="1205 1353 1368 1414">50-10000</td> <td data-bbox="1368 1353 1525 1414">± 15</td> </tr> </table>	Interval of permissible certified values for CRM types in a set		Limits of permissible values for errors of certified values at P=0,95	Mass fraction of fat, %:			F1	2,0-2,5	± 0,06	F2	2,6-3,0	F3	3,1-3,5	F4	3,6-4,0	F5	4,1-4,5	F6	4,6-5,0	F7	5,1-5,5	Mass fraction of total protein, %			F1 F2 F3 F4	1,7-2,7	± 0,04	F5 F6 F7	2,71-5,5	± 0,04	Mass fraction of protein (tru), %	1,50-5,00	± 0,03	Mass fraction of lactose, %	4,00-5,50	± 0,12	Mass fraction of dried skim milk residue, %	7,50-9,00	± 0,07	Mass fraction of dry matter, %	9,00-16,00	± 0,08	Freezing point, °C	minus 0,50 °C to minus 0,60 °C	± 0,01	Number of somatic cells, ths/cm ³	50-10000	± 15		2014–2015	<p>Participants of work: 1. Kazakhstan (9 organizations) 2. Russia (8 laboratories)</p>
Interval of permissible certified values for CRM types in a set		Limits of permissible values for errors of certified values at P=0,95																																																				
Mass fraction of fat, %:																																																						
F1	2,0-2,5	± 0,06																																																				
F2	2,6-3,0																																																					
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F5	4,1-4,5																																																					
F6	4,6-5,0																																																					
F7	5,1-5,5																																																					
Mass fraction of total protein, %																																																						
F1 F2 F3 F4	1,7-2,7	± 0,04																																																				
F5 F6 F7	2,71-5,5	± 0,04																																																				
Mass fraction of protein (tru), %	1,50-5,00	± 0,03																																																				
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Mass fraction of dry matter, %	9,00-16,00	± 0,08																																																				
Freezing point, °C	minus 0,50 °C to minus 0,60 °C	± 0,01																																																				
Number of somatic cells, ths/cm ³	50-10000	± 15																																																				

In d. NN	Country, CRM producer, contact person	Project	Certified characteristics	Planned values (range) of certified characteristics	Period of CRM development	Notes
1	2	3	4	5	6	7
<i>Part 2 (projects, proposed for initial consideration are included)</i>						
1.	<p>Kazakhstan OJSC “Kazchermetavtomatika” Karaganda T.S. Namazbaev Director</p> <p>Contact person: Vladimir D. Savelov Tel.; (7212) 44 07 13 Fax: (7212) 44 09 45 e-mail: kazchem@nursat.kz</p>	Development of CRM for moisture content and bulk density of blast-furnace coke	Moisture content Bulk density	0 –15 % 400 – 600 kg/m ³	2012–2015	<p>Participation of all COOMET member-countries is desirable</p> <p>Participants of work: 1. Ukraine - “Ukrmetrteststandart”</p>
2.	<p>Kazakhstan OJSC “Kazchermetavtomatika” Karaganda T.S. Namazbaev Director</p> <p>Contact person: Vladimir D. Savelov Tel.; (7212) 44 07 13 Fax: (7212) 44 09 45 e-mail: kazchem@nursat.kz</p>	Development of a set of CRMs of reference equivalent gages	Moisture content Bulk density	0 –15 % 400 – 600 kg/m ³	2012–2015	<p>Participation of all COOMET member-countries is desirable</p> <p>Participants of work: 1. Russia - OJSC “ZSICentre”</p>

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Part 2 (projects, proposed for initial consideration are included)						
3.	<p>Russia West-Siberian Research Institute of Physico-technical and Radiotechnical Measurements (VS NIFTRI) V.N. Egorov Director</p> <p>Contact Person: Margarita V. Kaschenko Head of Laboratory Tel.: (3952) 46-80-18 E-mail: kaschenko@niftri.irk.ru</p>	Development of CRM for complex permittivity (quartz glass)	<p>Relative permittivity (ϵ),</p> <p>Loss tangent of a dielectric ($tg\delta$)</p>	<p>2 – 400</p> <p>$5 \cdot 10^{-5} - 1 \cdot 10^{-3}$</p>	2012–2015	Participation of all COOMET member-countries is desirable;
4.	<p>Russia FGUP “Siberian Research Institute for Metrology” (FGUP “SNIIM”) Novosibirsk V.F. Matveychuk Director</p> <p>Contact Person: Sergey N. Sibirtsev Deputy Head of Department Tel.: (383) 229-75-89 Fax: (383) 210-13-60 E-mail: sibirsev@sniim.siberia.net</p>	Development of CRM set for complex permittivity within the frequency range of 1 -18 GHz	<p>Relative permittivity (ϵ'),</p> <p>Loss tangent of a dielectric ($tg\delta$)</p>	<p>2 – 300</p> <p>0,00005 – 0,005</p>	2012–2015	Participation of all COOMET member-countries is desirable, especially: Belarus Germany Moldova Russia Ukraine

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Part 2 (projects, proposed for initial consideration are included)						
5.	<p style="text-align: center;">Russia All-Russian Research Institute for Petroleum Refining (OAO “VNII NP”) Moscow Contact Person: Irina V. Tereshina Head of Metrological Research Laboratory Tel:(495)788-1553, 787-48-87, ext.1367 E-mail: metrology@vniinp.ru</p>	Development of CRM of actual gum concentration in jet fuel SO KFSA-1	Concentration of actual gums, mg/100 cm ³ of fuel/ mg/cm ³ of fuel CRM KFSA-1	1,0 – 5,0 0,050 – 0,150	2012–2015	Participation of all COOMET member-countries is desirable Participants of work: 1. Belarus - OJSC “Mozyr Petroleum Processing Plant”
6.		Development of CRMs of phosphor content in oil (2 types) SO MDF – 1; SO MDF – 2	Массовая доля, % CRM MDF – 1 CRM MDF – 2	0,02 – 0,10 0,10 – 0,20	2012–2015	Participation of all COOMET member-countries is desirable Participants of work: 1. Belarus - OJSC “Mozyr Petroleum Processing Plant”
7.		Development of CRM of fractional yield SO FS TN	% of distillation at the temperature CRM FS TH	up to 200°C – up to 300°C –	2012–2015	Participation of all COOMET member-countries is desirable Participants of work: 1. Belarus - PO “NAPHTAN” - OJSC “Mozyr Petroleum Processing Plant” 2. Kazakhstan -Scientific and Production Centre for Certification of Automobile Fuel and Oil “SATM and M”

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Part 2 (projects, proposed for initial consideration are included)						
8.	<p style="text-align: center;">Ukraine Cattle Breeding Institute National Academy of Agrarian Sciences of Ukraine Kharkov</p> <p>Contact Person: Igor A. Ionov Director Tel.: (057) 740-31-81, Fax: (057) 740-39-94 E-mail: ionov.i.a@mail.ru E-mail: it_uaan@bk.ru</p>	<p>Development of CRM for chemical composition of feedstuffs</p> <p><i>Note: CRM for chemical composition of feedstuffs will be uniform free-flowing powder of grey colour with particle size of 50 µm (30-40 g)</i></p>	<p>Mass fraction of components, %</p> <p>Dry substance Crude ash Crude fat Crude protein Crude fiber Calcium Phosphor</p> <p>Mass fraction of microelements, mg/kg</p> <p>Copper Zinc Manganese Iron</p>	<p>5,0-96,0 0,5-70,0 0,1-30,0 0,5-80,0 0,1-42,0 0,01-40,00 0,01-34,00</p> <p>0,2-16,0 1,0-85,0 3,0-200,0 10,0-1300,0</p>	2012-2015	<p>Participation of all COOMET member-countries is desirable</p> <p>Participants of work: 1. Kazakhstan West-Kazakhstan JSC “ NaTsEkS” - Republican Scientific and Methodical Centre of Agrochemical Service of the Ministry of Agriculture of RK 2. Russia (11 organizations)</p>
9.	<p style="text-align: center;">Russia “Institute Gipronickel, Ltd.” Centre for Development of Certified Reference Materials 11, Grazhdansky Pr., S. Petersburg, 195220 S.M. Kozyrev Research and Development Director</p> <p>Contact Person: Tatiana V. Shabelnikova Tel.: (8-812)-335-30-73 Fax: (812) 335-31-87 E-mail: shabco2008@mail.ru</p>	<p>Additional certification of GSO 9932-2011 for composition of nickel (NNMK-1) <i>CRM for composition of nickel is fine chips (1-3 mm)</i></p>	<p>Mass fraction of components, ppm:</p> <p>Sulphur Carbon Cobalt</p>	<p>3-4 25-35 250 – 350</p>	2012 - 2014	<p>Participation of all COOMET member-countries is desirable</p>

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Part 2 (projects, proposed for initial consideration are included)						
10.	<p>Russia OJSC “West-Siberian Testing Centre” (OAO “WSTCentre”), 9, Ordzhonikidze Str., Novokuznetsk Kemerovo Province 654006 Tatiana N. Voropaeva Deputy Gen. Director E-mail: zsic@mail.ru Tel.: (8-3843) 74-57-22 Fax: (8-3843) 74-39-76</p> <p>Contact Person: Elena Y. Tsukanova Leading Specialist Tel.: (8-3843) 74-56-34 E-mail: mineralog.mail.ru</p>	Development of CRM for composition and properties of coke SO-40	<p>Mass fraction of components, %</p> <p>sulphur hydrogen (total) carbon(total) phosphor potassium oxide sodium oxide Absolute density, g/cm³ ash content, % gross calorific value, MJ/kg volatile-matter yield, %</p>	<p>0,45 – 0,65 0,45 – 0,85 96,50 – 98,50 0,045 – 0,075 1,45 – 1,65 1,95 – 2,25 1,70 – 2,20 10,00 – 13,00 31,5 34,5 1,30 – 1,70</p>	2012 - 2014	<p>Participation of all COOMET member-countries is desirable</p> <p>1. Kazakhstan - “Centrgeoanalyte, Ltd” - Riddersk Ore-dressing Complex “Kazzinc Ltd.” - Aksusk Ferroalloy Works, JSC «Kazchrom”, Central Laboratory</p>
11.	<p>Russia FGUP “Ural Research Institute for Metrology” (FGUP “UNIIM”) 4 Krasnoarmeyskaya Str. Ekaterinburg, 620000 Sergey V. Medvedevskikh Director</p> <p>Contact Person: Egor P. Sobina Head of Laboratory Tel.: (343)2172925 Fax.: (343)3502039 E-mail: sobina_egor@uniim.ru</p>	Development of CRMs for composition of metallurgical slag	<p>Mass fraction of components</p> <p>Ag, g/t Al, % As, % Au, g/t Ca, % Cu, % Mg, % Ni, % Pb, % Sb, % Zn, %</p>	<p>SO KSH 3,0-6,5 0,5-2,0 0,01-0,03 0,25-0,50 0,5-2,0 1,0-2,0 0,3-1,0 0,005-0,02 0,3-0,6 0,007-0,02 3,0-6,00</p>	2013-2015	<p>Participation of all COOMET member-countries is desirable</p> <p>Participants of work: 1. Kazakhstan - “Centrgeoanalyte, Ltd” - Riddersk ore-dressing complex “Kazzinc, Ltd” - DGP “VNIITSVETMET”</p>

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Part 2 (projects, proposed for initial consideration are included)						
12.	<p style="text-align: center;">Russia</p> <p>“Institute Gipronickel, Ltd.” Centre for Development of Certified Reference Materials 11, Grazhdansky Pr., S. Petersburg, 195220 S.M. Kozyrev Research and Development Director</p> <p>Contact Person: Tatiana V. Shabelnikova Tel.: (8-812)-335-30-73 Fax: (812) 335-31-87 E-mail: shabco2008@mail.ru</p>	<p>Development of CRM for composition of cobalt <i>CRM for composition of cobalt is fine chips (1-3 mm)</i></p>	<p>Mass fraction of components, ppm:</p> <p style="padding-left: 40px;">Nickel Iron Copper Oxygen Hydrogen Nitrogen</p>	<p style="padding-left: 40px;">130 – 180 25 – 35 3,4 – 4,0 120 – 200 19-25 0,7 – 1,2</p>	2012 - 2014	Participation of all COOMET member-countries is desirable