The Afghanistan Engineering Support Program assembled this deliverable. It is an approved, official USAID document. Budget information contained herein is for illustrative purposes. All policy, personal, financial, and procurement sensitive information has been removed. Additional information on the report can be obtained from Firouz Rooyani, Tetra Tech Sr. VP International Operations, (703) 387-2151.

TETRA TECH

MEMORANDUM

To: [redacted] – USAID/OIEE

From: [redacted] - TT-AESP/TSM

Date: December 20, 2011

Re: **AESP WO-A-0058 Afghan Standardization: Summary Report**

EXECUTIVE SUMMARY

This memo will serve as the final summary report for AESP Work Order A-0058, Afghan Standardization Evaluation. This work order was opened in September 2010 at the request of the AESP COTR and has been active to present date. The main intent of the work order was to observe the processes utilized by the Afghan National Standards Association (ANSA) in the development and adoption of new national standards in multiple areas of focus.

In the past two years, ANSA has made great strides in its charge to develop voluntary National Standards for the benefit of the population and industries of the country. These National Standards are currently issued for voluntary compliance by the various industries affected. The long term goal is to make them enforceable through accreditation and regulatory framework.

As evidenced by the growing library of approved National Standards, many of the National Technical Committees (NTCs) are functioning effectively and progress is evident. Others are not. Several of the 'Code' development committees may be waiting for the results of the draft Afghanistan Building Code (ABC) to minimize duplication of efforts.

Most of the National Standards that have been ratified and adopted are international standards that have either been adopted as written or amended with minor modifications to comply with Afghan expectations.

Our Recommendations at the end of this report provide further details for USAID to consider.

OBJECTIVES

The objectives of this work order were identified as follows:

- Assess the current and proposed standards being adopted by the Afghan National Standards Authority (ANSA).
- Review the methodology being employed by ANSA to develop and adopt those standards.
- Meet with ANSA representatives to determine: a) what new standards are currently being considered/evaluated, b) what Technical Committees (TCs) are currently active and c) what future activities are being considered.
- Provide a formal report with recommendations for USAID to consider.

HISTORY/BACKGROUND of ANSA

In 2004, Presidential Decree 952 authorized the establishment of ANSA as the cornerstone standards making body for Afghanistan. The body was established within the Ministry 0f Commerce and Industries (MoCI). From 2004 to 2007, actual ANSA functions were limited due to lack of human resources, budget and work plan/strategy.

Recognizing the need for the ANSA to be a fully functional body to be effective, in August 2007 the Afghan Council of Ministers approved ANSA as an independent entity, removing it from the control of MoCI. This recommendation was approved of the Parliament of Afghanistan in February 2008. At that time, ANSA was given full-fledged membership and a seat on the Economic Committee of the Council of Ministers.

With the assistance of the United States Trade Development Agency (USTDA), ANSA embarked on an initial implementation project consisting of four tasks: 1) operational structure, 2) drafting a Standards Law, 3) development of a work plan and 4) providing material and training to ANSA staff. The final report for the implementation project was published in March 2009.

In 2010, the USAID funded Trade and Accession Facilitation for Afghanistan (TAFA) project provided ANSA with assistance, support and a strategy for the development and adoption of internationally accepted standards and certification procedures. One of the resulting products from this effort was the publishing of the "ANSA Strategic Plan (2011-2015) for the Development of a National Quality Infrastructure", which was ratified by the Supreme Council of Standards in March 2011. Another outcome of this effort included the publishing of a handbook entitled "Standards, Metrology and Conformity Assessment Tools to Facilitate Trade", also published in March 2011. (*Hard copies of both documents attached to this memo at time of delivery to USAID.*)

During 2011, ANSA experienced considerable progress in the establishment of functioning National Technical Committees (NTCs) focusing on developing national standards in the areas of petroleum products, food & agricultural products, pharmaceuticals & cosmetics, construction materials, textiles, environment and electro-technical products.

ANSA, with financial assistance from Harakat-AICFO, an independent Afghan managed NGO, has also contracted with a Turkish consulting firm, to assist in the development of the Afghanistan Building Code (ABC). The first draft of the ABC is scheduled to be completed in 2012.

OPERATIONAL STRUCTURE OF ANSA

The operational structure of ANSA is setup to provide for direct control by the Supreme Council of Standards. This council reports directly to Parliament and is chaired by a 2nd Vice President of Afghanistan. A number of government ministries and agencies are represented. The ANSA Director General and the Technical Deputy Director General are members of the council.

The area of focus for this work order, Standards Development, is under the direct control of the Technical Deputy Director General of ANSA. To carry out the mission of standards development, National Technical Committees (NTCs) have been established. Further explanation of the NTCs role and responsibility are detailed later in this memo.

To further the mission of ANSA, a number of strategic international organizational memberships and Memorandums of Understanding (MoUs) have been established. They include:

a) Membership in the International Organization for Standardization (ISO).
b) Affiliation with the International Electro-Technical Commission (IEC).
c) Membership in the South Asia Regional Standard Organization (SARSO).
d) MoUs aimed at bilateral cooperation and sharing of standards and guidelines with:
    a. Bureau of Indian Standards (BIS).
    b. Institute for Standards and Industrial Research of Iran (ISIRI).
    c. American Society for Testing Materials (ASTM).
    d. Standards Body of Tajikistan (TJKSTN).
    e. Turkish Standards Institute (TSE).
    f. Egypt Standard Organization (ESO).

Refer also to *Attachment 1 – ANSA Organizational Chart 2011* for additional details of the ANSA organizational structure.

NATIONAL TECHNICAL COMMITTEES (NTCs)

Numerous sectors have been identified for the development of national standards as follows:

1) Sector I: Basic and General Standards (ANSA/TC1)
2) Sector II: Health, Safety, Environment, and Quality Systems (ANSA/TC2)
3) Sector III: Agricultural and Food Products (ANSA/TC3)
4) Sector IV: Chemicals, Pharmaceuticals and Cosmetics (ANSA/TC4)
5) Sector V: Buildings and Civil Engineering (ANSA/TC5)
6) Sector VI: Petroleum Products (ANSA/TC6)
7) Sector VII: Mechanical Engineering and Metallurgy (ANSA/TC7)
8) Sector VIII: Electro-Technical (ANSA/TC8)
9) Sector IX: Textiles and Apparel (ANSA/TC9)
10) Sector X: Metrology (ANSA/TC10)
11) Sector XI: Structural Code (ANSA/TC11)
12) Sector XII: Highway and Bridge Code (ANSA/TC12)
13) Sector XIII: Urban Development Code (ANSA/TC13)
14) Sector XIV: Environmental Protection Standards (ANSA/TC14)
15) Sector XV: Architectural Code (ANSA/TC15)
16) Afghanistan Building Code (ABC)

Each NTC is intended to be comprised of members representing government, private sector and academia. There is an Operational Manual provided to each committee outlining guidelines and requirements for the standards development process. There is an application process by which membership is offered, reviewed and accepted/rejected. The secretary for each committee is elected by the membership of the committee and serves a one year term. Each committee is allowed to form sub-committees as required to focus on individual subject matter and facilitate the development of individual proposed standards. Committee membership and time commitments are strictly voluntary. Depending on the level of member participation and activity, individual committee and sub-committee meetings are usually held at the ANSA headquarters on a monthly or bi-weekly basis.

Refer also to *Attachment 2 - Technical Committee Officers* and *Attachment 3 - Technical Committee Members* for active National Technical Committees.

TETRA TECH

STANDARD DEVELOPMENT PROCESS

ANSA has established a definitive standard development process to which each committee must adhere. This six (6) stage process closely mirrors the development process issued by ISO in its guidelines for developing countries.

A brief outline of each of the six (6) stages is as follows:

Stage 1 – Proposal Stage: This stage allows for the identification of a need for a standard, either by adoption of a current international standard or the development of specific national standard. The request for the standard can be brought forth by any stakeholder group or technical committee member.

Stage 2 – Justification of the Need for a Standard: Once a proposal for a standard is received by ANSA, the appropriate NTC will review the proposal to determine the justification for the standard and make a recommendation.

Stage 3 – Development of a Draft Standard: A working group is established, either as a sub-committee or the full NTC, to determine the steps required for the development of the draft standard. A work plan is established, with priority assessments and target completion dates. Current established international standards are evaluated to determine the feasibility of complete adoption as written. If certain factors, such as economic, cultural, scientific and technological constraints, do not allow for direct adoption of an existing international standard, steps will be outlined and completed to modify that standard to create a new draft national standard.

Stage 4 – Inquiry Process: Once a final draft is deemed ready by the sub-committee for further consideration, the NTC can provide the document to appropriate parties, such as effected industry & academics, for input and comment. In an instance where an international standard is being proposed for adoption with no modifications, this Stage can be, and usually is, passed.

Stage 5 - Approval Process: Once a final draft standard is considered ready for approval by the NTC, it is distributed to all committee members and a defined period of time for review and comment is allotted. This process could result in various proposed amendments or revisions. All comments must be reviewed, discussed and completed before moving the final draft forward for approval. For the final draft to be approved, it must be approved by at least two-thirds of the NTC membership and cannot by disapproved by more than one quarter of the membership.

Stage 6 – Adoption Process: Upon completion of the proposed national standard, the ANSA NTC submits it to the Supreme Council of Standards for consideration. The Supreme Council of Standards then submits the standard to the Parliament for ratification. Upon receiving ratification, ANSA will proceed with announcing and publishing the new National Standard.

STATUS OF NATIONAL STANDARDS

As of the date of this report, Afghanistan currently has 82 approved and ratified National Standards in place. The breakdown of standards completed, listed by NTC, is as follows:

National Technical Committee	# of Standards in Place
ANSA/TC6 – Petroleum Products	27
ANSA/TC3 – Food & Agri. Products	20
ANSA/TC8 – Electro-Technical	12
ANSA/TC9 – Textiles & Apparel	7
ANSA/TC4 – Chem., Pharm. & Cosmetics	7
ANSA/TC10 – Metrology	5
ANSA/TC5 - Buildings & Civil Eng.	3
ANSA/TC14 – Environ. Protection	1

Refer to *Attachment 4 – List of National Standards* for a complete list of the current National Standards. Publications of these standards can be obtained upon request to ANSA.

Also, there are a number of draft standards in various stages of consideration and completion. Refer to *Attachment 5 – Standards Pending Committee Approval* and *Attachment 6 – Standards Underway within Committee*.

RECOMMENDATIONS

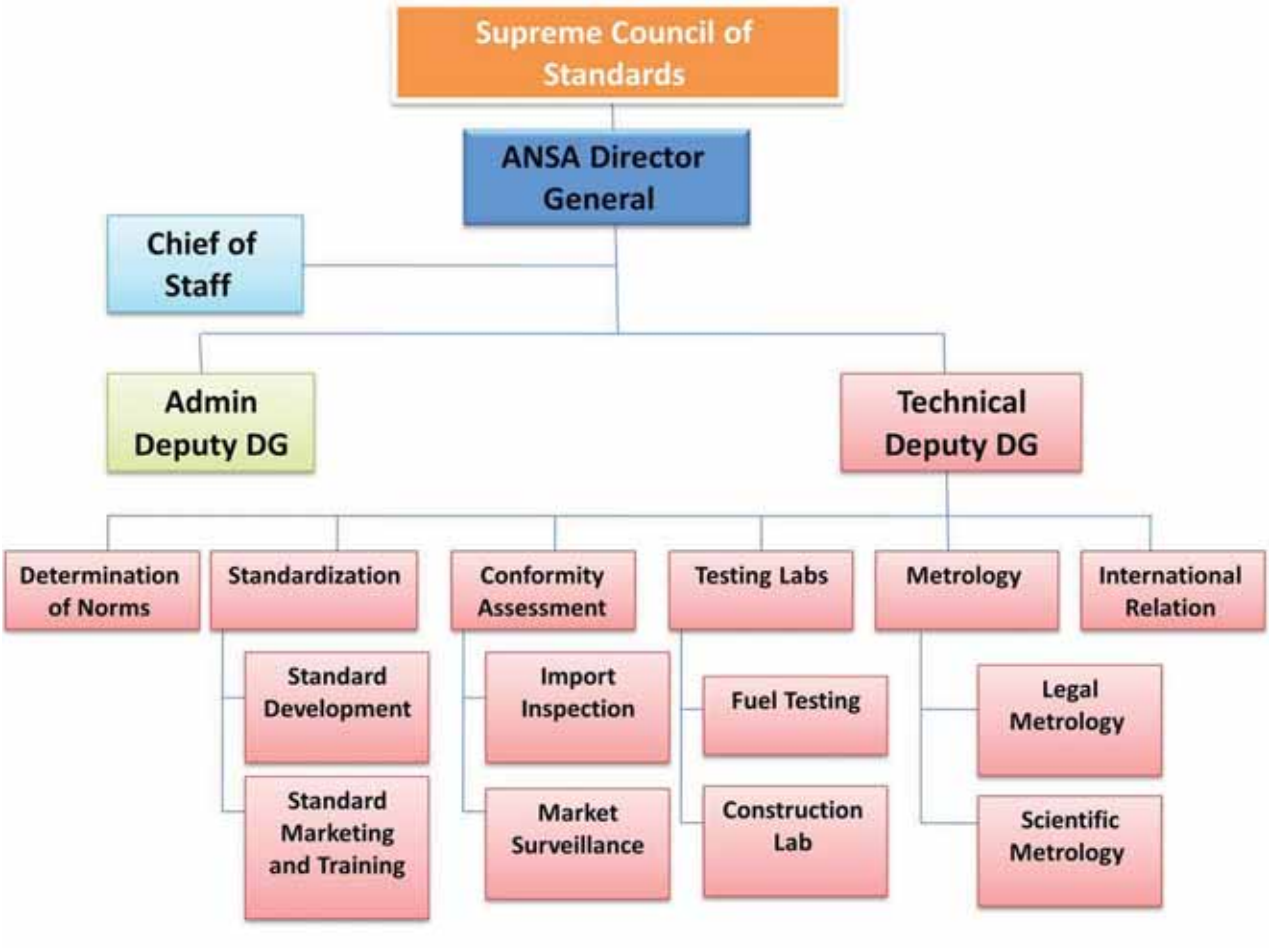
Based on interviews & meetings with the Technical Deputy Director General and direct observations of NTCs in operation, Tetra Tech AESP provides the following recommendations for USAID consideration:

1. Provide USAID technical representation and regular participation on the appropriate ANSA NTCs. The 'make-up' of some of the NTCs seem to be lacking an international development perspective and technical expertise. The USAID representative(s) should be Afghan or at least be fluent in Dari/Pashto language. These representatives could be direct USAID employees or perhaps USAID Implementing Partner (IP) technical staff.

2. Where applicable, review and consider adoption of the Afghan National Standards for use on USAID funded projects/programs. This area will become more crucial as more USAID-funded projects/programs go "on budget" and the Afghans strive to standardize on materials and methods on a national basis.

3. Provide direct USAID technical, and perhaps financial, support to those NTCs specifically tasked with Code development work, including the ABC. This is another area where the direct benefit to USAID projects/programs becomes evident. The depth of USAID international technical expertise would be invaluable to the Afghan committee members, in a true capacity building effort, to ensure the new national Codes would meet the minimum standards required for USAID funded projects/programs.

ANSA Organizational Chart - 2011



ATTACHMENT 2
December 20, 2011

INFORMATION REGARDING TECHNICAL COMMITTEE MEMBERS
STANDARD DEVELOPMENT OFFICERS

Name	Title	Technical Committee #	Contact info
[redacted]	Food and Agricultural Products standard Development Expert	3	[redacted]
[redacted]	Food and Agricultural Products standard Development specialist	3	
[redacted]	Food and Agricultural Products standard Development specialist	3	[redacted]
[redacted]	Food and Agricultural Products standard Development specialist	3	
[redacted]	Chemicals pharmaceuticals and Cosmetics standard development officer	4	[redacted]
[redacted]	Chemicals pharmaceuticals and Cosmetics standards development officer	4	[redacted]
[redacted]	Chemicals pharmaceuticals and Cosmetics standards development expert	4	[redacted]
[redacted]	Chemicals pharmaceuticals and Cosmetics standards development Specialist	4	[redacted]
[redacted]	Chemicals pharmaceuticals and Cosmetics standard development officer	5	[redacted]
[redacted]	Chemicals pharmaceuticals and Cosmetics standard development officer	5	[redacted]
[redacted]	Chemicals pharmaceuticals and Cosmetics standard development specialist	5	[redacted]
[redacted]	PETROLEUM PRODUCTS standards development expert	6	[redacted]
[redacted]	PETROLEUM PRODUCTS	6	[redacted]

[redacted]	standards development specialist		
[redacted]	PETROLEUM PRODUCTS standards development expert	6	[redacted]
[redacted]	PETROLEUM PRODUCTS standards development expert	6	[redacted]
[redacted]	Electro technical standards development officer	8	[redacted]
[redacted]	Electro technical standards development officer	8	
[redacted]	Textile and Apparels standards development specialist	9	[redacted]
[redacted]	Textile and Apparels standards development officer	9	[redacted]
[redacted]	Metrology standards development expert	10	[redacted]
[redacted]	Metrology standards development officer	10	[redacted]
[redacted]	Structural code development officer	11	[redacted]
[redacted]	Highway and Bridge code development officer	12	[redacted]
[redacted]	Urban development code officer	13	[redacted]
[redacted]	Environmental Protection Standards	14	
[redacted]	Architectural code development officer	15	[redacted]
[redacted]	ABC Project manager		[redacted]

SCHEDULE OF TC MEETINGS

TC 3: Location is ANSA, meetings are on Wednesdays and twice a month
TC4: Location is ANSA, meetings are on Mondays and twice a month
TC5: Location is ANSA, meetings are on Tuesdays and twice a month
TC6: Location is ANSA, meetings are on Tuesdays and twice a month
TC8: Location is ANSA, meetings are on Wednesdays and twice a month
TC9: Location is ANSA, meetings are on Sundays and twice a month
TC10: Location is ANSA, meetings are on Wednesdays and twice a month
TC11: Location is ANSA, meetings are based on schedule
TC12: Location is ANSA, meetings are based on schedule
TC13: Location is ANSA, meetings are based on schedule
TC14: Location is ANSA, meetings are based on schedule

ATTACHMENT 3
December 20, 2011

Technical Committees members

1- Agricultural and Food Products (ANSA/TC 3)

No	Name	Organization
1	Prof. QamaruddinSaifi	Ministry of Higher Education
2	Abdul LatifYusufzai	Ministry of Economy
3	KamelaSultani	Ministry of Public Health
4	MahbobaAbavi	FAO
5	Haji Amanuddin	ACCI
6	Mohammad YsinFrahmand	Academy of Science
7	Abdul HameedKhamosh	Ministry of commerce
8	Ali Akbar	Ministry of Agriculture
9	Khaja Abdul Rahman	Raisin, Vegetable and Fruit Export Promotion Agency
10	MohammdWkilRahimi	Afghan National Standards Authority
11	GhulamHaidarMateen	Afghan National Standards Authority
12	AtiqullagYaser	Afghan National Standards Authority
13	Yar Mohammad Aubi	Afghan National Standards Authority

2- Chemicals, Pharmaceutical and Cosmetics (ANSA/TC 4)

No	Name	Organization
1	Khalil Khakzad	Afghanistan Nationwide Pharmacists Association
2	HabibullahFarahi	Faculty of Science
3	JonaidNemati	Faculty of Pharmacy
4	M. KarimHaidari	Faculty of Pharmacy
5	KamelaSultani	Ministry of Public Health
6	Nooria	Ministry of Public Health
7	JomatullahHosani	Academy of Science
8	Mohammad Shah	Pharmaceuticals services
9	Ahmad Said Shams	Pharmaceutical manufacturers Association
10	Mohd. Mohsen Masoud	A C C I
11	Dr Ahmad shah Pardes	World Health Organization
12	Mohammad Nazir	Ministry of Public Health
13	Wahidullahkarwar	MSH/SPS
14	Mirza M. Ayubi	Afghan National Standards Authority
15	Dr. GhulamDarwishMansoori	Afghan National Standards Authority
16	HelayAzadzoi	Afghan National Standards Authority
17	Hamid Furmuly	Afghan National Standards Authority

3- Building and Civil Engineering (ANSA/TC 5)

No	Name	Organization
1	Aminullah (hadayat)	MRRD
2	Murtaza (Sherzoi)	Academr of Sinncee
3	GulamYahya (Taher)	MOCI
4	Shermohammd (Niazi)	Mines
5	Mohammad Ibrahim (ibrahimi)	ANSA

6	Enayatullah (Yama)	ANSA
7	Esmatullah (Hayat)	ANSA
8	faridmomand	Kabul University
9	Mohammad Hakim (mohammadi)	Jabulsaraj cement fabric
10	Rahmatullah	MOPW
11	mohamdzilgai	MOCP
12	faroqnabi	MOUD
13	Ali hussainhussaini	MOPW
14	fraidonAlkozai	Kabul University

4- Petroleum Products (ANSA/TC 6)

No	Name	Organization
1	MohammadZubairAzimi	Ministry of Commerce and Industries
2	GhulamRasulAfzali	NEPA
3	Hamedullahhemat	Ministry of Defense
4	Mohammad WasimQuraishi	Afghan National Standards Authority
5	HayatullahAmini	Science of Academia
6	Abdul Karim Ashraf	Ministry of Mines
7	Mohammad Zaher	Ministry of Transport
8	GulamSarwerHamgam	Afghan National Standards Authority
9	FarhadYousefzai	Afghan National Standards Authority
10	Nabila MohmandAyar	Afghan National Standards Authority
11	WagmaStanikzai	Afghan National Standards Authority
12	Mohammad Akbar Hassani	Kabul Polytechnic University

5- Electro – Technical (ANSA?TC 8)

No	Name	Organization
1	HabibulrahmanRahmat	National Advisor MEW
2	Mohammad EhsanRahimi	Afghan National Standards Authority
3	Amir Mohamad	MEW
4	Mohammad ShafiSharifi	Faculty of Engineering
5	Mohammad Qais	KPU Kabul Poly technic University
6	M. IsahqSamim	WAPICA-MEW
7	M. JamilWardak	MRRD/NABDY/ERDA
8	MalaliBarekzai	MEW
9	Mohammad WaliOria	DABS
10	SaeedNajeebAnwari	Barg Engineering & Consulting Co
11	M. Hashim	MEW
12	Mohammad Jahanger	MoD
13	M. ShoaibSahibzada	AEIC/AEAI
14	Abdul JamilMusleh	ANSA
15	SaboorArya	MRRD/NSP
16	Ali Jan	MEW
17	Fazela	MoUD
18	GhulamFaruq	MoUD

19	MohammdAkramShahim	Acadmy of Science
20	Talee Mohammad	AISA
21	Ahmad Shabir	Tetratech/USAID
22	Gulrasool	Head of PMCEEC
23	Mohammad Sediq	Union of electrica traders
24	Mohammad Amiri	MEW

6- Textiles and Leather (ANSA/TC 9)

No	Name	Organization
1	Eng. RohmatgolAhmadi	Academy of science
2	Eng. yasinwafa	Industrial park
3	Haji Abdul SattarQadari	Carpet union
4	Eng. khwajamohShafiSadiqi	MOIC
5	BibijanAslamy	Tanweer
6	Moh. AlamAndarabi	Costams
7	EnayatullahMahmadzai	Handicraft department
8	Eng. NafisaStanikzai	Afghan National Standards Authority
9	Zohrapayenda	Afghan National Standards Authority
10	Haji Sarajidin	ACCI
11	Haji HafizullahAbedi	ACCI
12	HabibullahFarhyee	Kabul university
13	M. Amin Nazary	Kabul university

7- Metrology (ANSA/TC 10)

8- Environmental (ANSA/TC 14)

No	Name	Organization
1	Ghulam M. Malikyar	NEPA
2	MohammadNaseer	Ministry of Mines
3	Noor Mohammad	NEPA
4	Mohammad Alam	Custom house
5	Mohammad Hassan Hameed	Polytechnic university
6	AminullahTukhi	APHA
7	Mohammad HamedRahmati	AGCHO
8	Sultan Mohammad dawran	Ministry of Public Health
9	Abdul Qayum	Terrafic department
10	Mohammad BaseerAzam	science of academia
11	WasimQuraishi	Afghan National Standards Authority
12	prof. Abdul AhadKhaliqi	Polytechnic university
13	Prof. SairurahmanSaifi	Meteorology Department
14	Sultan Homayon Amin	Ministry of transport
15	FahimullahZiaee	MAIL
16	HussainEtemadi	Uraban development affairs
17	Abdul Ahadpayenda	MRRD
18	Asadullahyosuf	Ministry of Mines
19	GhulamSarwar	Afghan National Standards Authority
20	WagmaStanikzai	Afghan National Standards Authority

AFGHAN NATIONAL STANDARDS AUTHORITY (ANSA)

LIST OF NATIONAL STANDARDS

NO	Name of Standard	No of Standard	Status	TC
1	Specification for liquified Petroleumm Gases	AS 101	Approved	**Petroleum Products**
2	Raisins	AS 102	Approved	**Food and Agricultural Products**
3	Wheat and drum wheat	AS 103	Approved	**Food and Agricultural Products**
4	Fats and edible oils	AS 104	Approved	**Food and Agricultural Products**
5	National Standards for wheat flour	AS 105	Approved	**Food and Agricultural Products**
6	Specification for Warp of Warp coton Yarns in carpets	AS 106	Approved	**Textile and Apparels**
7	Standard specification for aiation turbine fuels	AS 107	Approved	**Petroleum Products**
8	Specifications for Voile Fabrics	AS 108	Approved	**Textile and Apparels**
9	Air Quality standard	AS 109	Approved	**Chemicals pharmaceuticals and Cosmetics**
10	Power cables with extruded insulation and their accessories for rated voltages from 1 kV (Um = 1,2 kV) up to Food and Agricultural Products0 kV (Um = Food and Agricultural ProductsPetroleum Products kV) - Part 2: Cables for rated voltages from Petroleum Products kV (Um = 7,2 kV) and Food and Agricultural Products0 kV (Um = Food and Agricultural ProductsPetroleum Products kV)	AS 110	Approved	**Electro technical**
11	Hard-drawn Aluminum wire for overhead line conductors	AS 111	Approved	**Electro technical**
12	Zinc coated steel wires for stranded conductors	AS 112	Approved	**Electro technical**

13	Round wire concentric lay overhead electrical standard conductors	AS 113	Approved	**Electro technical**
14	Guide to the selection of high-voltage cables.	AS 114	Approved	**Electro technical**
15	Insulation co-ordination - Part 1: Definitions, principles and rules	AS 115	Approved	**Electro technical**
16	Insulation coordination for equipment within low-voltage systems - Part 1: Principles, requirements and tests	AS 116	Approved	**Electro technical**
17	Insulators for overhead lines with a nominal voltage above Metrology00 V - Ceramic or glass insulator units for a.c. systems - Characteristics of insulator units of the cap and pin type	AS 117	Approved	**Electro technical**
18	Insulators for overhead lines with a nominal voltage above 1 000 V - Ceramic insulators for a.c. systems - Characteristics of insulator units of the long rod type	AS 118	Approved	**Electro technical**
19	Insulators for overhead lines with a nominal voltage above Metrology00 V - Part 1: Ceramic or glass insulator units for a.c. systems - Definitions, test methods and acceptance criteria	AS 119	Approved	**Electro technical**
20	Insulator for over low with nomenal volatage above Metrology00V enamic and glass for Ac specification for insulatur type along rude type	AS 120	Approved	**Electro technical**
21	Protection against electrical shock	AS 121	Approved	**Electro technical**
22	Cylindrical knob type weights (1 g to Metrology kg)	AS 122	Approved	**Metrology**
23	Specifications of warp cotton yarns in blankets	AS 123	Approved	**Textile and Apparels**
24	Specification Portland Cement	AS 124	Approved	**Building and Civil Engineering**
25	Rod Tar	AS 125	Approved	**Petroleum Products**
26	Liquid Toilet Soap-Specification	AS 126	Approved	**Chemicals pharmaceuticals and Cosmetics**
27	Soaps-Determination of Chloride content Titrimetric method	AS 127	Approved	**Chemicals pharmaceuticals and Cosmetics**
28	Standard specification for road tar	AS 128	Approved	**Petroleum Products**
29	Hair Shampoo-Specification and Test methods	AS 129	Approved	**Chemicals pharmaceuticals and Cosmetics**
30	Iron Weights arallelepiped	AS 130	Approved	**Metrology**
31	**In use vehical emission standards**	AS 131	Resent to TC for review	**Enviromental**

32	Bringer Balance	AS 132	Approved	**Metrology**
33	National standards for milk powders and cream powder	AS 133	Approved	**Food and Agricultural Products**
34	Standard Classification and specification for Automotive Service Greases	AS 134	Approved	**Petroleum Products**
35	None load bearing concrete masonry	AS 135	Approved	**Building and Civil Engineering**
36	Specification for voile fabrics	AS 136	Approved	**Textile and Apparels**
37	Toothpaste-Specification and Test methods	AS 137	Approved	**Chemicals pharmaceuticals and Cosmetics**
38	Standard for Cone Penetration of Lubricating Grease	AS 138	Approved	**Petroleum Products**
39	Standard for Dropping point of lubricating Grease	AS 139	Approved	**Petroleum Products**
40	Standard for Determining the water washout characteristics of lubricating Greases	AS 140	Approved	**Petroleum Products**
41	Standard for oil separation from lubricating Grease during storage	AS 141	Approved	**Petroleum Products**
42	Standard for Determining corresion Preventive Properties of Lubricating Grease	AS 142	Approved	**Petroleum Products**
43	Standard for Dropping Point of lubricating Grease over wide Tempreature Range	AS 143	Approved	**Petroleum Products**
44	Standard for wear preventive characteristics of lubricating Grease	AS 144	Approved	**Petroleum Products**
45	Standard for Messurement of exteme-pressure properites of lubricating grease	AS 145	Approved	**Petroleum Products**
46	Standard for Utilization of test data to determine conformance with specifications	AS 146	Approved	**Petroleum Products**
47	Standard for life performance of automotive wheel bearing Grease	AS 147	Approved	**Petroleum Products**
48	Standard for Fretting wear protection by lubricating Grease	AS 148	Approved	**Petroleum Products**
49	Standard for Elastomer compatibility of lubricating Grease and fluids	AS 149	Approved	**Petroleum Products**
50	Standard for Deterining the leakage tendencies of automotive wheel bearing grease under accelerated conditions	AS 150	Approved	**Petroleum Products**
51	Cosmetics Products-Classification	AS 151	Approved	**Chemicals pharmaceuticals and Cosmetics**
52	Low-Temperature Torque of Grease-Lubricated Wheel Bearing	AS 152	Approved	**Petroleum Products**
53	General standard for bottled/packaged drinking waters	AS 153	Approved	**Food and Agricultural**

				Products
54	Standard Specification for Asphalt Used in Dampproofing and Waterproofing	AS 154	Approved	**Petroleum Products**
55	Standard Test Method for penetration of Bitminous Materials	AS 155	Approved	**Petroleum Products**
56	Standard Test Method for softening point of bitument (Ring- and Ball Apparatus)	AS 156	Approved	**Petroleum Products**
57	Standard Test Method for Flash and fire points by Cleveland open cup tester1	AS 157	Approved	**Petroleum Products**
58	Standard Test Method for Ductility of Bituminous Materials	AS 158	Approved	**Petroleum Products**
59	Standard for sampling bituminous materials	AS 159	Approved	**Petroleum Products**
60	Standard Test Method for Solubility of Asphalt Materials in Trichloroethylene1	AS 160	Approved	**Petroleum Products**
61	Standard for softenin point of asphalt and pitch	AS 161	Approved	**Petroleum Products**
62	Surface active agents - Analysis of soaps - Determination of free caustic alkali	AS 162	Approved	**Chemicals pharmaceuticals and Cosmetics**
63	Animal and vegetable fats and oils - determination of acid value an acidity	AS 163	Approved	**Food and Agricultural Products**
64	Animal and vegetable fats and oils-determination of saponification value	AS 164	Approved	**Food and Agricultural Products**
65	Animmal an begetable fats and oils- determination of lead by direct graphite furance atomic absorption spectroscopy	AS 165	Approved	**Food and Agricultural Products**
66	Animal and vegetable fats and oils- determanition of coper,iron and nickel contents- Graphite furance atomic absorptiion method	AS 166	Approved	**Food and Agricultural Products**
67	Animal and vegetable fats and oils- determination of insoluble impurites content	AS 167	Approved	**Food and Agricultural Products**
68	Animal and vegetables fats and oils determination of moisture and volatile matter content	AS 168	Approved	**Food and Agricultural Products**
69	Animal and vegetable fats an oils-determanition of peroxide value-Iodometric(visual) endpoint determation	AS 169	Approved	**Food and Agricultural Products**
70	Determination of bulk density called mass per hectolitre	AS 170	Approved	**Food and Agricultural Products**
71	Wheat (Triticul aestivum L) specification	AS 171	Approved	**Food and Agricultural Products**

72	Determination of impurities,sizeforeigh odours,insects and species and variety	AS 172	Approved	**Food and Agricultural Products**
73	Cereals, pulses and by- products- determinatin of ash yield by incineration	AS 173	Approved	**Food and Agricultural Products**
74	Determination of fat acidity	AS 174	Approved	**Food and Agricultural Products**
75	Cereals and pulses- Determination of the nitrogen content and calculation of the crude protein contect	AS 175	Approved	**Food and Agricultural Products**
76	Beam scale	AS 176	Approved	**Metrology**
77	Clay brick specification and test method	AS 177	Approved	**Building and Civil Engineering**
78	Guidance and explanatory labels for fabric	AS 178	Approved	**Textile and Apparels**
79	standards for table garapes	AS 179	Approved	**Food and Agricultural Products**
80	Classification and definitions of sheep and goat raw skin defects	AS 180	Approved	**Textile and Apparels**
81	Method of salt curing of sheep and goat skins	AS 181	Approved	**Textile and Apparels**
82	Transprtable refillable welded steel cylinder for liquefied petroleuim gas	AS 182	Approved	**Metrology**

List of all final draft Standards pending for approval by individual committees

1- Agricultural and Food Products (ANSA/TC 3)
   a. CODEX STANDARD FOR SUGARSCODEX STAN 212-1999 (Amd. 1-2001)
2- Chemicals, Pharmaceutical and Cosmetics (ANSA/TC 4)
   a. ISO 1067-1974 (E) Analysis of Soaps – Determination of unsaponifiable, unsaponified and unsaponifiedsaponifiable matter.
   b. ASTM E2363-06a (Standard Terminology Relating to Process Analytical Technology in the Pharmaceutical Industry)
   c. ISO 673 – 1981 (E) Soaps - Determination of content of ethanol-insoluble matter Second Edition1981-06-01.
   d. *USP31–NF26* Heavy metals in Cosmetics.
   e. ISO 685-1975 (E) Analysis of Soaps – Determination of total alkali content and total fatty matter content.
3- Building and Civil Engineering (ANSA/TC 5)
   a. ISO 6935-1 Steel for the reinforcement of concrete Part 1: Plain bars
   b. ISO 6935-2 Steel for the reinforcement of concrete Part 2: Rbbed bars.
4- Petroleum Products (ANSA/TC 6)
   a. ASTM D 2026 – 97 (Reapproved 2004), Standard Specification for Cutback Asphalt (Slow – Curing Type)
   b. ASTM D 2027 – 97 (Reapproved 2004), Standard Specification for Cutback Asphalt (Medium – Curing Type)
   c. ASTM D 2028 – 97 (Reapproved 2004), Standard Specification for Cutback Asphalt Rapid – Curing Type)
5- Electro – Technical (ANSA?TC 8)
   a. Non
6- Textiles and Leather (ANSA/TC 9)
   a. ISIRI 344 Specifications for Karakul skin
   b. ISIRI 1502 Method of Preparation Principle, Maintenance and manufacture of karakul skin
   c. ISIRI 1240-7 Specification for Hand Woven Woolen Carpets.
7- Metrology (ANSA/TC 10)
   a. Non
8- Environmental (ANSA/TC 14)
   a. Non

List of all standards that are currently still in process in TCs

1- Agricultural and Food Products (ANSA/TC 3)
2- Chemicals, Pharmaceutical and Cosmetics (ANSA/TC 4)
    a. ASTM D 4267-95 Standard Specification for Label for small volume (100 ml or Less) Parenteral Drug containers
    b. ASTM D 3587 Standard Specification for Rubber Examination Gloves
    c. ASTM D 3577 D Standard Specification forRubber Surgical Gloves
    d. ASTM D 4447 D Standard Guide forDisposal of Laboratory Chemicals and Samples
3- Building and Civil Engineering (ANSA/TC 5)
    a. Standard Specification for Steel structural
4- Petroleum Products (ANSA/TC 6)
    a. ASTM D 4057-06 Standard Practice for Manual Sampling of Petroleum and Petroleum Products.
5- Electro – Technical (ANSA?TC 8)
    a. IEC 60507
    b. IEC 60471
    c. IEC 60137
6- Textiles and Leather (ANSA/TC 9)
    a. Specification of Raw Silk grading
    b. Specification for Cattle Hides and Calf (Wet Salted Skins)
7- Metrology (ANSA/TC 10)
    a. Pressure Cooker
8- Environmental (ANSA/TC 14)
    a. Water Resource