ITU G.722.2

# EXPERIMENT 9.8
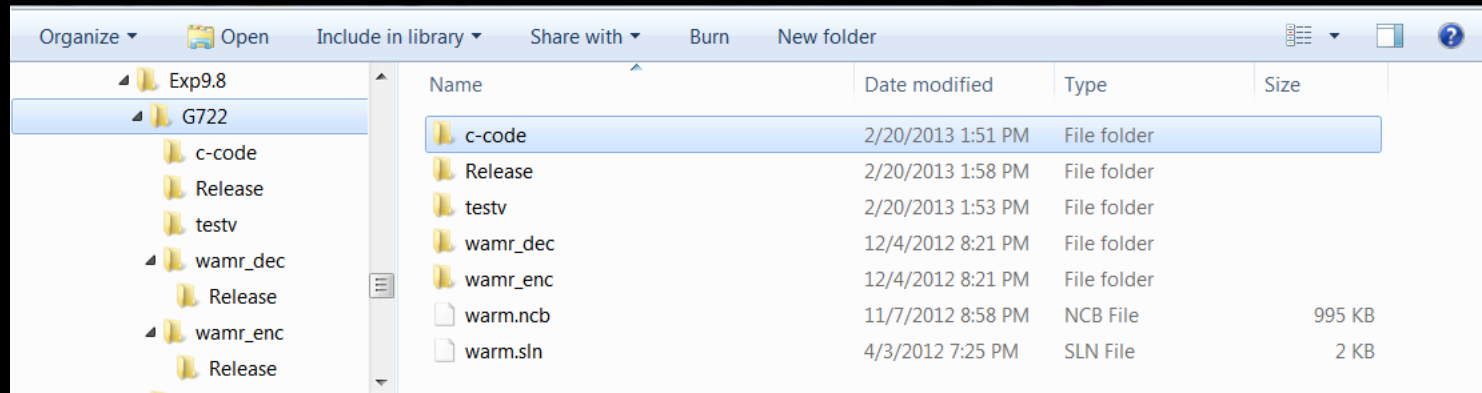
# Propose of the experiment

- G.722.2 is a wideband speech codec. This experiment shows how to build the G.722.2 on a PC using Microsoft Visual C.

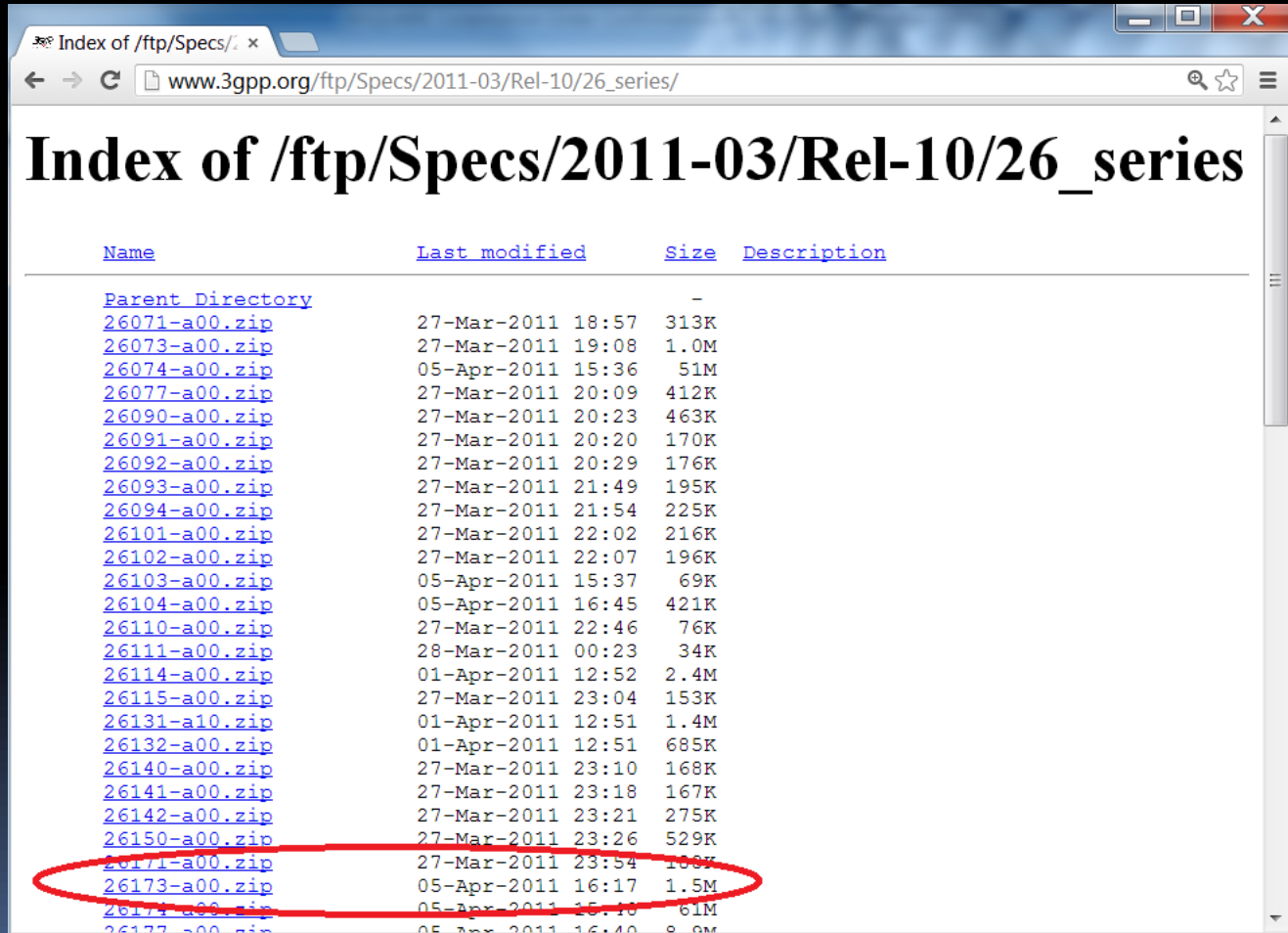# Experiment Folder Structure
*(Exp9.8 G.722.2 Experiment)*



- c-code folder contains source code
- Release folder contains the experiment executable programs.
- testv folder contains test vectors.
- wamr_dec folder contains decoder VC project.
- wamr_enc folder contains encoder VC project.

# Download Software
*(http://www.3gpp.org/ftp/Specs/2011-03/Rel-10/26_series/)*

# Prepare Software

- Download 26173-a00.zip.
- Unzip 26173-a00.zip.  The unzip will have two files:
  - 26173-a00_ANSI-C_source_code.zip
  - 26173-a00.doc
- Unzip 26173-a00_ANSI-C_source_code.zip. This upzip creates two folders:
  - C-code
  - testv

# Folder - testv
*(Contains test vectors and batch files for testing)*

- .bat – batch file
- .inp – input test vector
- .cod – encoded bits
- .out – decoded vector

| Name | Date modified | Type | Size |
|---|---|---|---|
| dtx.inp | 1/31/2001 12:47 PM | INP File | 125 KB |
| test_dec.bat | 1/31/2001 12:51 PM | Windows Batch File | 1 KB |
| test_enc.bat | 1/31/2001 12:50 PM | Windows Batch File | 1 KB |
| tst.inp | 3/7/2001 4:10 PM | INP File | 125 KB |
| tst_m0.cod | 3/5/2002 4:19 PM | COD File | 53 KB |
| tst_m0.out | 3/5/2002 4:20 PM | OUT File | 125 KB |
| tst_m1.cod | 3/5/2002 4:19 PM | COD File | 71 KB |
| tst_m1.out | 3/5/2002 4:20 PM | OUT File | 125 KB |
| tst_m2.cod | 3/5/2002 4:19 PM | COD File | 100 KB |
| tst_m2.out | 3/5/2002 4:20 PM | OUT File | 125 KB |
| tst_m3.cod | 3/5/2002 4:19 PM | COD File | 113 KB |
| tst_m3.out | 3/5/2002 4:20 PM | OUT File | 125 KB |
| tst_m4.cod | 3/5/2002 4:19 PM | COD File | 125 KB |
| tst_m4.out | 3/5/2002 4:20 PM | OUT File | 125 KB |
| tst_m5.cod | 3/5/2002 4:19 PM | COD File | 144 KB |
| tst_m5.out | 3/5/2002 4:20 PM | OUT File | 125 KB |
| tst_m6.cod | 3/5/2002 4:19 PM | COD File | 157 KB |
| tst_m6.out | 3/5/2002 4:20 PM | OUT File | 125 KB |
| tst_m7.cod | 3/5/2002 4:19 PM | COD File | 182 KB |
| tst_m7.out | 3/5/2002 4:20 PM | OUT File | 125 KB |
| tst_m8.cod | 3/5/2002 4:19 PM | COD File | 188 KB |
| tst_m8.out | 3/5/2002 4:20 PM | OUT File | 125 KB |
| tst_md.cod | 3/5/2002 4:19 PM | COD File | 49 KB |
| tst_md.out | 3/5/2002 4:20 PM | OUT File | 125 KB |

# Folder - c-code

*(Contains G.722.2 source files)*

- .c – C source file
- .h – C header file
- .tab – data table file
- .gcc – makefile
- .txt – text file

| Name | Date modified | Type | Size |
|------|---------------|------|------|
| acelp.h | 8/25/2003 1:00 AM | H File | 30 KB |
| agc2.c | 8/25/2003 1:00 AM | C File | 3 KB |
| autocorr.c | 8/25/2003 1:00 AM | C File | 3 KB |
| az_isp.c | 8/25/2003 1:00 AM | C File | 12 KB |
| basic_op.h | 8/25/2003 1:00 AM | H File | 4 KB |
| basicop2.c | 8/25/2003 1:00 AM | C File | 108 KB |
| bits.c | 9/29/2006 9:57 AM | C File | 14 KB |
| bits.h | 11/12/2004 12:30 ... | H File | 3 KB |
| c2t64fx.c | 8/25/2003 1:00 AM | C File | 11 KB |
| c4t64fx.c | 8/25/2003 1:00 AM | C File | 36 KB |
| cnst.h | 3/20/2007 1:39 PM | H File | 4 KB |
| cod_main.c | 8/25/2003 1:00 AM | C File | 63 KB |
| cod_main.h | 8/25/2003 1:00 AM | H File | 4 KB |
| coder.c | 8/25/2003 12:00 A... | C File | 11 KB |
| convolve.c | 8/25/2003 1:00 AM | C File | 2 KB |
| cor_h_x.c | 8/25/2003 1:00 AM | C File | 3 KB |
| count.c | 8/25/2003 1:00 AM | C File | 7 KB |
| count.h | 8/25/2003 1:00 AM | H File | 5 KB |
| d_gain2.c | 8/25/2003 1:00 AM | C File | 12 KB |
| d2t64fx.c | 8/25/2003 1:00 AM | C File | 3 KB |
| d4t64fx.c | 8/25/2003 1:00 AM | C File | 6 KB |
| dec_main.c | 9/30/2007 11:43 PM | C File | 42 KB |
| dec_main.h | 8/25/2003 1:00 AM | H File | 3 KB |
| decim54.c | 8/25/2003 1:00 AM | C File | 8 KB |

# Folder - Release
*(Contains G.722.2 source files)*

| Name | Date modified | Type | Size |
|------|---------------|------|------|
| wamr_dec.exe | 11/7/2012 8:57 PM | Application | 104 KB |
| wamr_enc.exe | 11/7/2012 8:57 PM | Application | 138 KB |

- wamr_dec.exe – decoder executable program.

- wamr_encc.exe – encoder executable program.

# Folder - wamr_dec
*(Contains G.722.2 decoder VC project)*

| Name | Date modified | Type | Size |
|------|---------------|------|------|
| Release | 12/4/2012 8:21 PM | File folder | |
| wamr_dec.vcproj | 10/31/2012 8:20 PM | VCPROJ File | 9 KB |

- wamr_dec.vcproj – decoder VC project file.

# Folder - wamr_enc
*(Contains G.722.2 decoder VC project)*

| Name | Date modified | Type | Size |
|------|---------------|------|------|
| 📁 Release | 12/4/2012 8:21 PM | File folder | |
| 📄 wamr_enc.vcproj | 10/31/2012 8:20 PM | VCPROJ File | 9 KB |

- wamr_enc.vcproj – encoder VC project file.