Memory Reduction (HMA, UMB's*, Code reduction/Optimization)

New/Improved Utilities (shell, Install, QBI*, /?*, etc.)

New Hardware Support*

Rewritten Documentation*

Fully ROM executable DOS with power management support**

Removal of LINK from DOS*; Removal of EXE2BIN from Upgrade*

Currently under consideration:
- Mouse in HMA
- File Transfer Utility (external acquisition:Traveling Software; alternate: Westlake Data)
- Undelete (external acquisition:Central Point Software; alternate: Westlake Data)

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* Addition/Modification to original DOS 5.0 plan
** ROM executable DOS to ship 6-8 weeks after disk based DOS as an update (supplement?) to the DOS BAK.

DOS50 DOC - Printed 7/2/90

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RBC 001602

Execute in HMA
- Dos Kernel and Bios relocate to the HMA as provided by XMS
- Command.com executing in HMA*
- Support internal DOS interface for sharing HMA with other DOS device Drivers and utilities - Undocumented*
- Put majority of buffers in HMA*
- Relocate part of HIMEM to HMA*

Reduction of <640K memory footprint
- Replace support for buffers in EMS and Hash org for buffers with 3.3 LRU algorithm.
- Remove Fastopen Extents caching
- Enable access to large partitions without loading share
- Remove IFS
- Optimize Message retriever and other Command.com Code
- Reusable Command.com code (savings of 2K for each invocation after the initial command.com)*
- Upper Memory Block (UMB) Support in DOS and EMM386*

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*   Addition to original DOS 5.0 plan

DOS 5.0 Plan Overview - New/Improved Utilities

New MS-DOS Shell
- Task Swapper (enhanced winoldapp)*
- Menu structure more consistent with windows Program/File Manager*
- Direct Manipulation of Files for move/copy*
- Support combined view (program and File manager)*
- Improved online help
- Visual/functional improvements
- Supports renaming of directories

New MS-DOS OEM and Upgrade Installation
- Significant usability improvements
- Automatic config.sys/autoexec setup
- Support for 1.2M, 1.44M, 2.88M*, 360K, 720K diskettes.
- Designed for future integration with Windows
- Complete online help
- Full recovery (Upgrade only)
- Support for install from drives other than A (including Net with appropriate SETUP.INF file)*
- Write-protected installation diskettes*

Replace BASICA/GW-BASIC with Quick Basic Interpretor and Full Screen Editor (some OEM's will ship both basic's; Full screen editor requires QBASIC.EXE)*

/? on all commands*

DIR Improvements
- Subdirectory search
- Sort by name, extension, date, size, or diskorder
- Control of display by attribute (eg Hidden only, DIR only, etc.)
- List file names only (useful for batch processing)
- Lowercase display*

Format Enhancements:
- Safe format
- unformat
- Quick format (useful for quickly erasing a disk/diskette; Required for R/W Optical)*
- Media Sensing (formats diskette to appropriate density)*

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*   Addition to original DOS 5.0 plan

DOS 5.0 Plan Overview - New/Improved Utilities Continued

Comand history and Command macros (DOSKEY)

SETVER utility (tells DOS to "lie" about version to an app).*

Improved expanded memory support (emm386) including VCPI, busmaster support, and UMB* support.

Other Miscellaneous Enhancements:
- Attrib control of system and hidden attributes
- DISKCOPY /V option (verify copy is correct)*
- Recover prompt/warning*
- Pipes use TEMP environment variable (specifies dir in which the tempoary file is created).*
- Wildcard support in FC (File compare)*
- Support for Exec only attribute on network files*

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*   Addition to original DOS 5.0 plan

2.88 Meg Diskettes*

Format changes for R/W optical*

Media sensing*

Graphic printer support for HP B&W PCL*

>2 Fixed disks

>2 diskettes (3-rd and later begin after last fixed disk)

New keyboard support: brasilian, (and for IBM: Turkish, Latin II, Icelandic, Russian in OAK only)*

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*   Addition to original DOS 5.0 plan

DOS50.DOC - Printed 7/2/90

DOS 5.0 Plan Overview - New Documentation

Completely rewritten documentation (task oriented with more examples/scenarios)*

Combined User's Guide and Command Reference with single index

Several Beta site's have stated that the new docs are a great improvement.

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*   Addition to original DOS 5.0 plan

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RBC 001607

Fully ROM executable DOS*
- Requires 64K ROM (excluding externals and init code); 70K is required for executable DOS and the init code.
- 15K Low memory footprint
- Init code will copy from ROM to RAM and execute in RAM. Not an issue since it is discarded after system initialization.

Power Management*:
- suspend/resume
- multiple level power management

Standard ROM disk emulator support.*

Multiboot Option*
- User may bypass ROM
- Allows boot from any disk
- Allows configuration from any drive

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* Addition to original DOS 5.0 plan.

Hardware Requirements
- Intel 8088/86 or better based computer
- 256k System memory[1]
- 1 Floppy disk drive

COGS
- Current diskette projections[1]:
    + Three 720K
    + five 360K
    + 2 1.2M
    + 1 2.8M

- Documentation
    + $3.50 per manual (assuming 50K print volumes)

    -

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[1]   384K is required to run QBASIC or EDIT. 512 K is required to run setup (because setup spawns
        FDISK and FORMAT).

[t]   Three 720's represents an increment of one in diskettes for DOS 5.0.

DOS 5.0 Plan Overview - Schedule

Milestone	Planned	Actual/Projected
Code Complete	3/90	7/90[1]
Beta 1	5/15/90	6/15/90
Beta 2 and Early Ship Program	6/15/90	8/15/90
OEM OAK to PRM; RUP to Canyon Park	8/90	10/1/90 (zero slack)
ROM OEM OAK to PRM	10/90	11/90

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[1]   Coding of original plan work items was completed 4/90

DOS50.DOC - Printed 7/2/90

DOS 5.0 Plan Overview - Beta Program

Currently 240 beta customers
- Approx 75 Corporate (skewed toward high end because most came from Windows beta)
- Approx 65 ISV
- Approx 95 OEM (including 40 non-OEM oems)
- 5 press

Plan to expand:
- Add approx 15 more authors
- Add key contacts from user groups (use list from Tonyad):
  - Either fly user group contacts to Redmond or go to them and present DOS 5.0 Beta.
- Keep expanding ISVs/IHV' (scan Byte, PC Mag, etc) and include all HD and HD Software manufacturers
- Utilize MS Internal resources (MS DOS apps test orgs; Developers; Initiate company wide update with Beta 2; Present Brown bag seminars on DOS 5.0)
- Invite active Compuserve/BIX users to participate; Get names from MS Sysops.
- Weekend onsite bug bashes (invite PSS/MS-Press, local user groups, University professors/classes; Provide free mug or t-shirt for participants)
- Utilize Compuserve for DOS Beta Support
- Initiate Nationwide corporate preview of Beta 2