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FILED/ACCEPTED

JAN 26 2007

Federal Communications Commission  
Office of the Secretary

January 26, 2007

Marlene H. Dortch, Secretary  
Federal Communications Commission  
445 12<sup>th</sup> Street, S.W.  
Washington, D.C. 20554

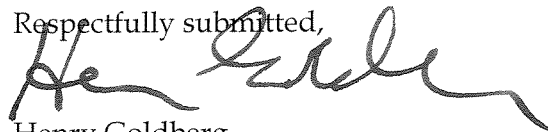
Re: File No. SAT-MOD-20061206-00144  
*Ex Parte*

Dear Ms. Dortch:

This is to inform you that, on January 22, 2007, in connection with the above-referenced proceeding, Alexandra Field, Vice President of Regulatory Affairs, TerreStar Networks, Inc., Ted Kaplan of RKF Engineering Solutions LLC, Thomas Tycz of this firm, and the undersigned, met with Julius Knapp, Chief of the Office of Engineering and Technology and Ron Repasi and James Burtle of OET. The purpose of the meeting was to discuss TerreStar's need to select its operating frequencies as soon as possible and to reach agreement with New ICO Satellite Services G.P.. The materials that were provided and discussed are attached hereto.

Please direct any questions regarding this matter to the undersigned.

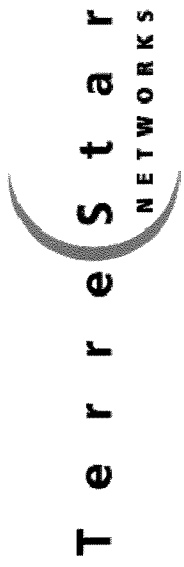
Respectfully submitted,



Henry Goldberg  
Attorney for TerreStar Networks, Inc.

Attachment

cc: Julius Knapp  
Ron Repasi  
James Burtle



# Band Selection Issues

## 22 January, 2007



*Proprietary and Confidential – Use or distribution subject to restrictions on first page*

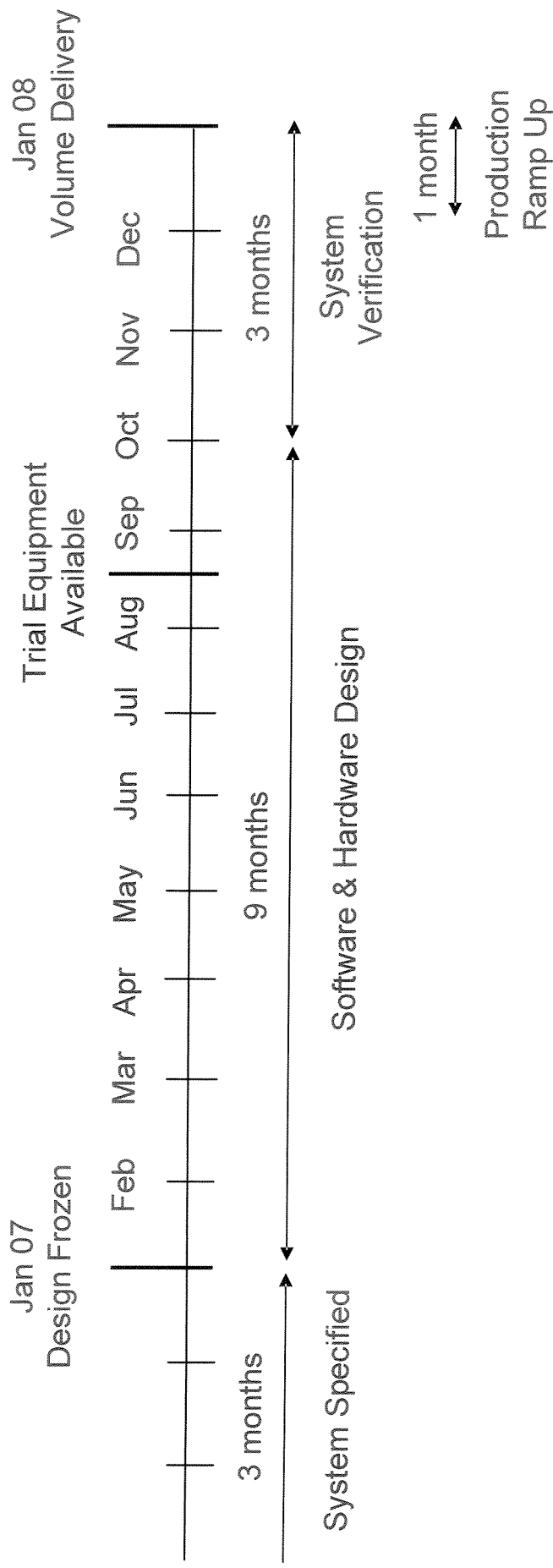
# Band Selection and Channel Assignment for Base Stations

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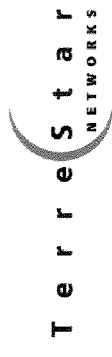
- **TerreStar Vendors can progress only so far with their R & D without final band selection**
  - Blocks Selection – Which combination of the S-band blocks will TerreStar be assigned?
    - A and C, B and D, A and D or B and C
  - Transmit and Receive Spacing – What will the spacing be?
- **Base Station impact**
  - Designs have already progressed significantly beyond the “from scratch” phase
  - The development timeline is already pressed to meet the required system deployment date, any changes to the current design (channel spacing) will cause extra challenges in meeting the timeline.
  - The later the decisions are made, the greater the impact.
  - Changes to the current assumptions will further delay the timelines

# Base Station Development Timeline

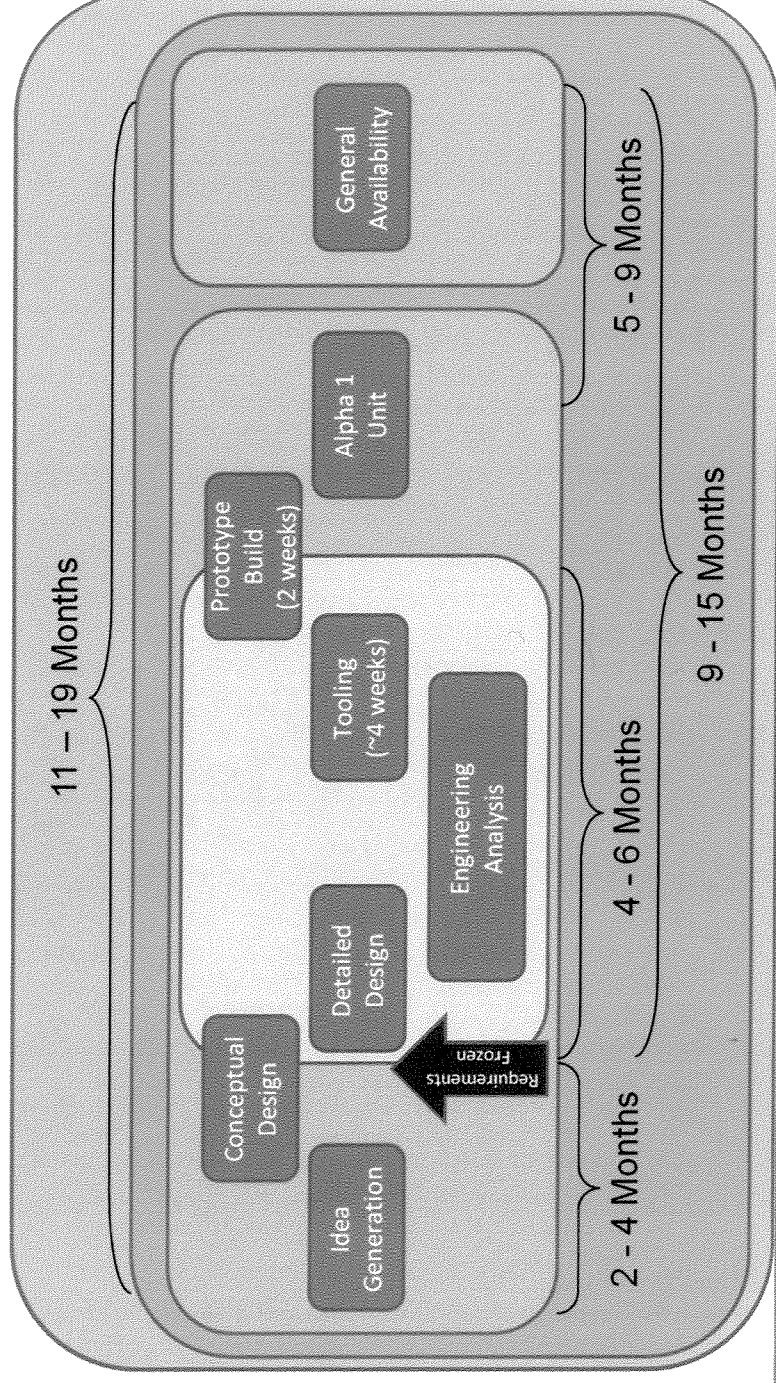
- Based on a 15 Month Process



# Handset Development Timelines - Industry Historical Perspective



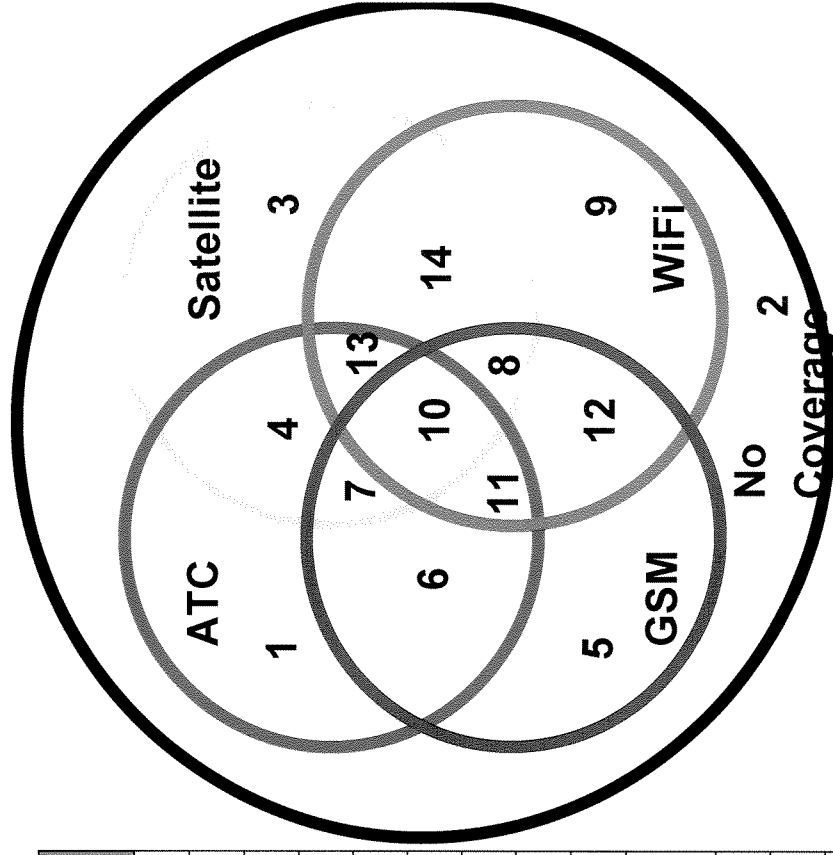
- A typical time frame to development handset is between 11 and 19 months
  - **First of its kind products can take 24 to 30 months (i.e. Apple iPhone, Motorola Razor)**
- Development of some hardware components and chipsets has a dependency on the actual frequencies used
  - **A delay in knowing the frequencies will very probably push out all delivery milestones**



# Why such a long development time? Think Mobility from a handset perspective

- Increasingly complex handset features and data services require more sophisticated software
- ~85% of workload in 3/4G handsets is in software design
- Software design is heavily impacted by chipset
- Chipset is impacted by frequencies used

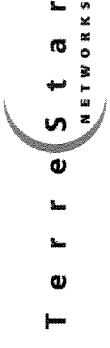
Zone	Network	Possible States	Combinations
1	ATC	2	2
2	No coverage	1	1
3	Satellite	2	2
4	ATC + SAT	4	8
5	GSM	2	2
6	ATC + GSM	4	8
7	ATC + SAT + GSM	8	384
8	SAT + GSM	4	8
9	WiFi	2	2
10	ATC + SAT + GSM + WiFi	14	645120
11	ATC + GSM + GSM	8	384
12	GSM + WiFi	4	8
13	ATC + SAT + WiFi	8	384
14	SAT + WiFi	4	8



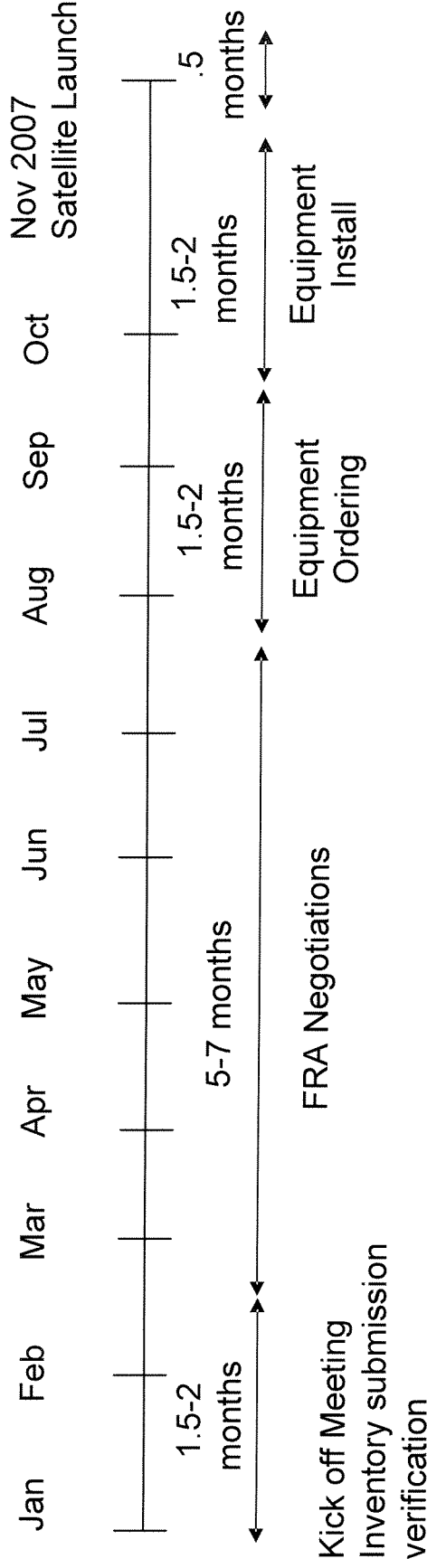
# **Band Selection and Microwave Market Clearing**

- **TerreStar cannot properly plan or begin incumbent microwave clearing in support of satellite initial operation without band selection**
  - Use of 10 MHz downlink for satellite depends on actual frequencies used
- **TerreStar is delayed in microwave clearing for ATC deployment**
  - Clearing process is 10-13 month process and must be cleared prior to ATC/satellite operations
    - Financial risk of TerreStar launching satellite and not being able to radiate due to delay in microwave clearing driven by delayed band selection
    - Significant financial impact
      - For example, TerreStar analysis shows that for Miami market there are 34 interfered paths in A/B bands and 18 interfered paths in C/D. Early clearing activity that is subsequently reversed by band selection would be of significant financial impact to TerreStar

# Microwave Clearing Timeline



- Based on 10-13 Month standard Process





# Band Selection and Channel Assignment

