

April 27, 2018

Iridium Communications Inc. : IRDM

Analyst: Matt Lucarelli

Sector: Telecommunications

Industry: Communications Equipment

Current Price: \$12.15

Target Price: \$15.09

Company Description: Iridium Communications, offers mobile satellite communications services.

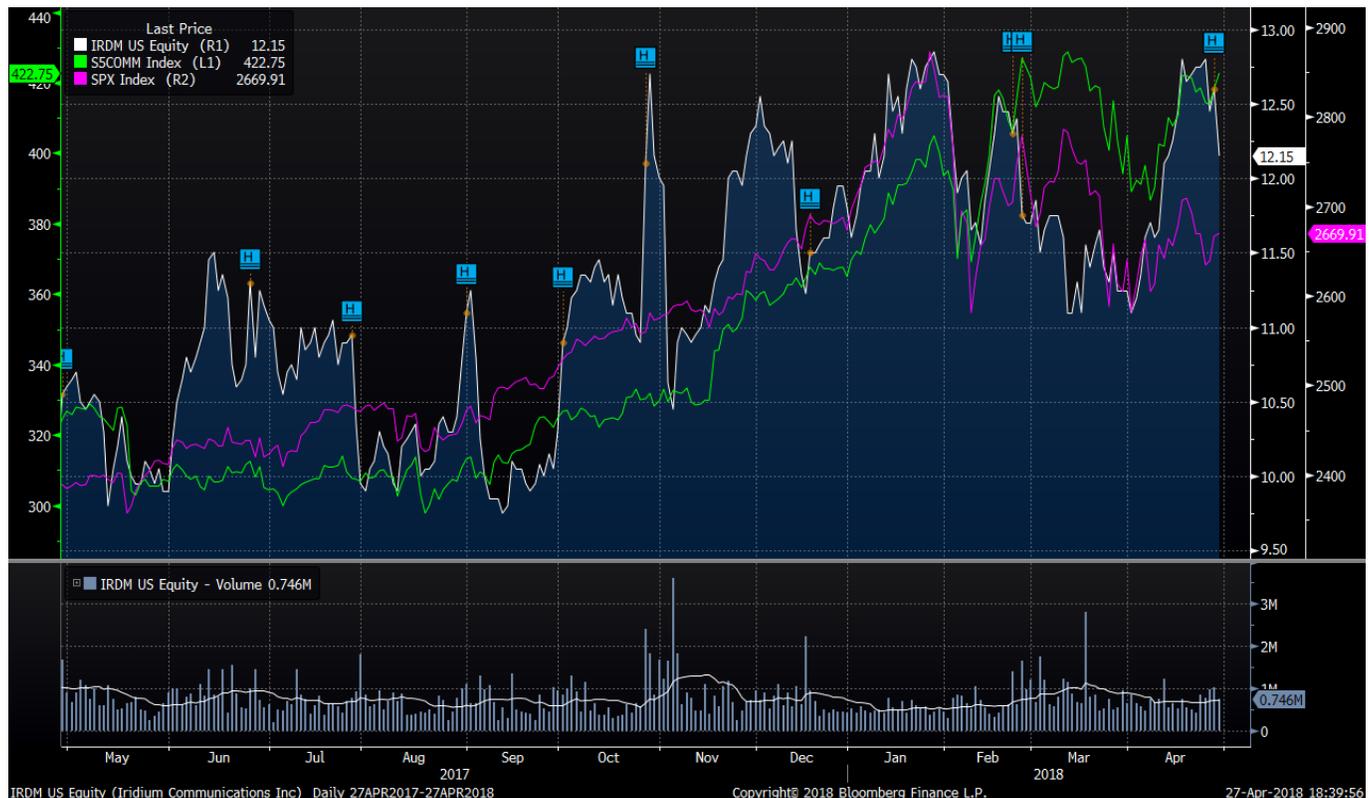
The company's satellites operate in a low-earth orbit and provide 100% global coverage. They offer voice and data communications services to the United States and foreign governments, businesses, non-governmental organizations, and consumers.

BUY

Current Price:	\$12.15
Target Price:	\$15.09
Market Cap:	\$1,341B
52 Week Range:	\$9.68 - \$13.25
Beta:	1.26
ROE:	17.54%
WACC (Adj.):	2.50%
ROIC (Adj.):	3.50%
EBITDA Margin:	50.60%

Catalysts:

- **Short Term (within the year):** Recent earnings call on April 26th, 2018. Iridium NEXT constellation replacement.
- **Mid Term (1-2 years):** Expanding their distribution network and strengthening their relationship with the government
- **Long Term (3+):** Development of new products and services, which will give them the opportunity charge more fees and attract more subscribers.



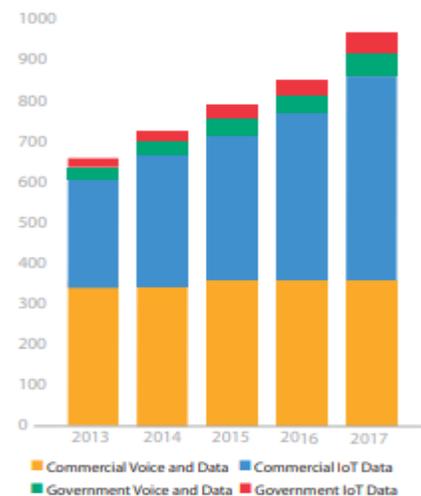
Thesis:

Iridium is a commercial provider of communications services offering true global coverage, connecting people, organizations and assets to and from anywhere, in real time. With a recent earnings call and the implementation of the Iridium NEXT project, I believe this will positively impact the company in the short term. While the company already possess contracts with the United States government and many other foreign governments, they are motivated to continue to grow their relationships and their services. In the future, Iridium seeks to develop new products and services, in which they will be able to charge additional fees and expand their company. Furthermore, Iridium presents an increasing revenue growth yoy, a robust EBITDA margin, and increasing subscriber growth. I believe this company is undervalued because people are unaware of what particular services they offer, and are not recognizing the significant demand for the types of services they provide.

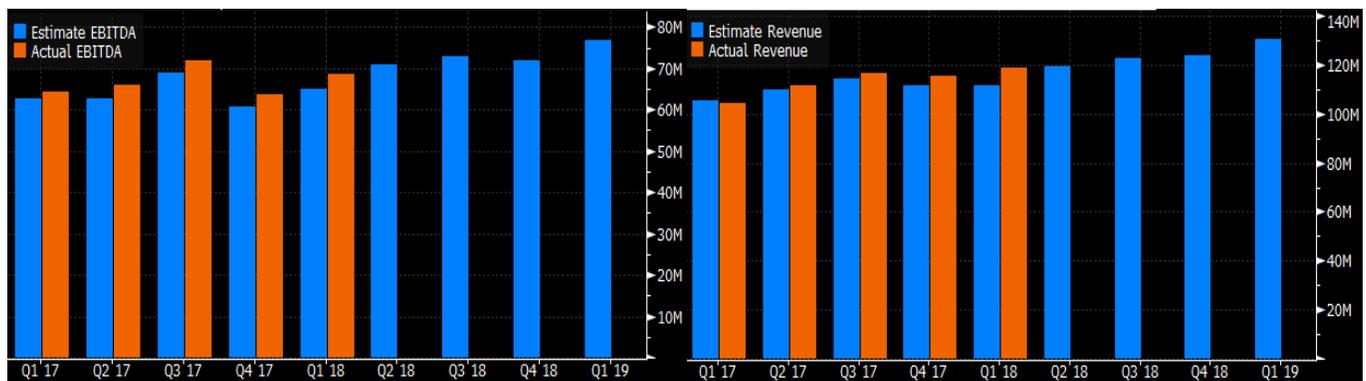
Financial Overview:

Recently, the company has witnessed strong subscriber momentum of 14% in the past year of 2017. Thus, lead to an operational EBITDA growth of 4%, which exceeded their full-year guidance. The company aligns itself with large growth partners for its commercial business. Since many of their business partners depend on real time connectivity to improve the management of their global assets, this helped fuel a 23% rise in Iridium's IoT subscribers in 2017. In addition, hurricane activity also fueled incremental demand for Iridium equipment in 2017, as three major storms hit the U.S. and Caribbean. These events caused a 4% rise in subscriber equipment revenue, with equipment margins rising to 42%. The company also held a steady revenue in their government business at \$88 million in 2017. In addition, the company recognized a tax benefit of \$114.3 million, which is why they had a significant increase in their net income.

Robust Subscriber Growth
(subscribers in thousands)



In the 1st quarter of 2018, Iridium beat their highest analyst estimate for revenue. The 1st quarter revenue was \$119.1 million, while the estimate was at \$111.5 million, with a range of \$109 million to \$114 million. Even with the increase in revenue the stock price still decreased. I believe this was because of the misconception with the company's net income. The company recognized a \$37.9 million net income in the 1st quarter of 2017, while in the 1st quarter of 2018, the company realized a net income of \$11.5 million. This decrease in net income was



primarily the result of a \$25.0 million increase in depreciation and amortization expense compared to the year-ago period and the recognition of a \$14.2 million gain in the prior year period triggered by the Company's insourcing transaction with Boeing. The outlook for the total service revenue is expected to be around 8% to 12%, with an estimated EBITDA margin of 58.6%, which is an 8% increase from the previous year. Iridium has consistently beat their estimates for EBITDA and revenue quarter over quarter and is expected to continue to increase for the rest of 2018.

Services Offered:

Iridium owns the only mobile voice and data satellite communications network that spans the entire globe. A technology innovator and market leader, Iridium enables connections between people, organizations and assets to and from anywhere, in real time. Iridium's architecture of 66 low-earth orbiting (LEO) satellites operates as a fully meshed, cross-linked network and is the world's largest commercial constellation. The company has a major development program underway for its next-generation network Iridium NEXT. Reaching over oceans, through airways and across the Polar Regions, Iridium solutions are ideally suited for industries such as maritime, aviation, emergency services, mining, forestry, oil and gas, heavy equipment, transportation and utilities. Iridium also provides service to subscribers from the U.S. Department of Defense, as well as other civil and government agencies around the world. Together with its ecosystem of partner companies, Iridium delivers an innovative and rich portfolio of reliable solutions for markets that require truly global communications.

Currently, the company is in the process of replacing their first-generation constellation with their Iridium NEXT satellite constellation, which will support more bandwidth and higher speeds for new products. The total investment of the project is expected to be \$3 billion, which is being financed primarily through debt. So far, there have been six successful launches for deploying the satellites in space, with only two launches of 10 satellites remaining.

For their wholesale distribution, the specialized needs of their global end users span many markets, including emergency services, maritime, aviation, government, utilities, oil and gas, mining, recreation, forestry, heavy equipment, construction and transportation. They sell their products and services to commercial end users primarily through a wholesale distribution network of service providers, VARs and VAMs, which often specialize in a particular line of business. Their distributors use their products and services to develop innovative and integrated communications solutions for their target markets, often combining their products with other technologies, such as GPS and terrestrial wireless technology.

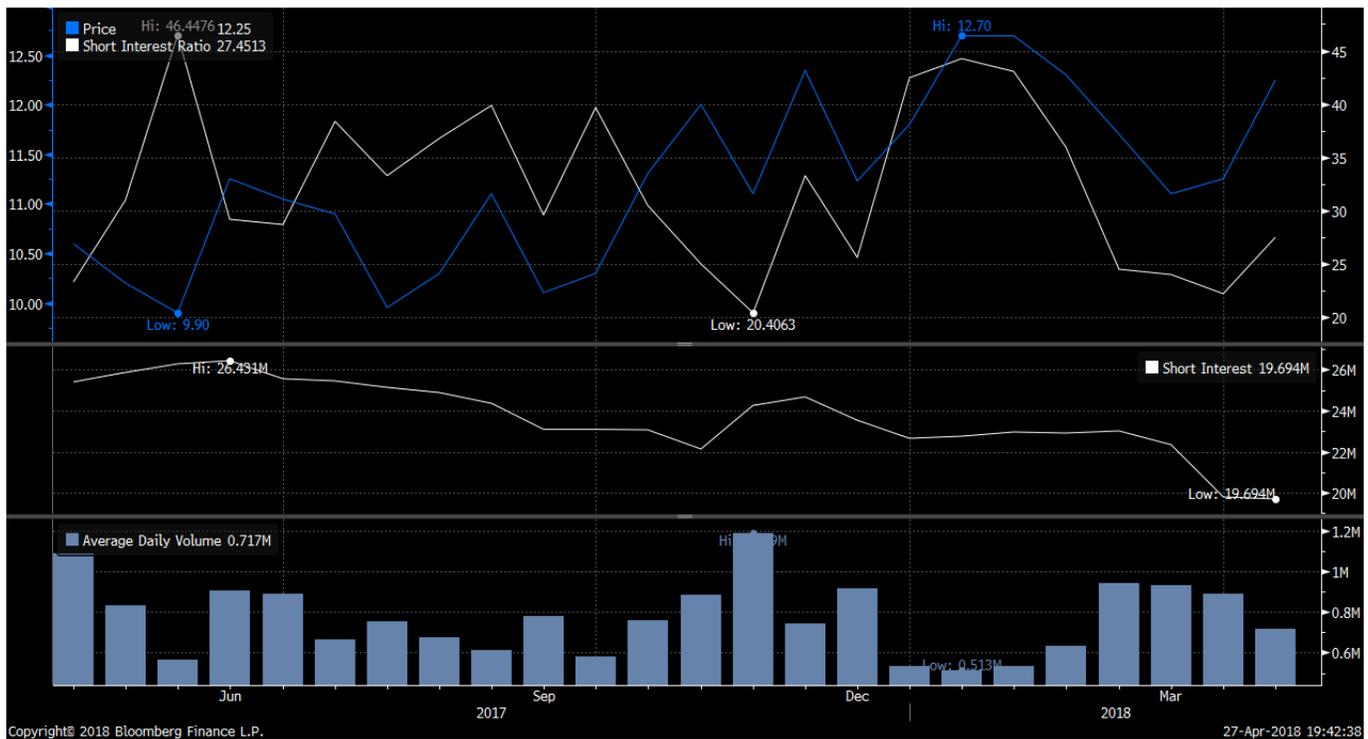
Iridium's satellites relies on an interlinked mesh architecture to transmit signals from satellite to satellite, which reduces the need for multiple local ground stations around the world and facilitates the global reach of other services. GEO satellites orbit above the earth's equator, limiting their visibility to far northern or southern latitudes and Polar Regions. LEO satellites from operators like Globalstar and ORBCOMM use an architecture commonly referred to as "bent pipe," which requires voice and data transmissions to be immediately routed to ground stations in the same region and can only provide real-time service when they are within view of a ground station, limiting coverage to areas near where they have been able to license and locate ground infrastructure. The LEO design of their satellite constellation produces minimal transmission delays compared to GEO systems due to the shorter distance the signals have to travel. Additionally, LEO systems typically have smaller antenna requirements and are less prone to signal blockage caused by terrain and other environmental factors

than GEO satellite networks. As a result, I believe that Iridium is well-positioned to capitalize on the growth in the industry from end users who require reliable, easy-to-use communications services in all locations

Ownership:

The ownership of the company primarily consists of investment advisors and individuals. Blackrock and Vanguard Group hold the most percentage of share out currently at 11.10% and 9.05%. Hedge fund managers have not taken much interest or changed their ownership that much in the company over the past year. The percentage of float consists of 150.61%.

54) Ownership Type	04/23/17	Curr	Change
41) Investment Advisor	82.77	85.35	+2.58
42) Individual	12.12	9.95	-2.17
43) Hedge Fund Manager	1.45	1.65	+0.20
44) Pension Fund	1.20	1.17	-0.03
45) Insurance Company	1.17	1.10	-0.07
46) Bank	0.54	0.45	-0.09
47) Government	0.16	0.13	-0.03
48) Brokerage	0.16	0.08	-0.08
49) Sovereign Wealth Fund		0.06	

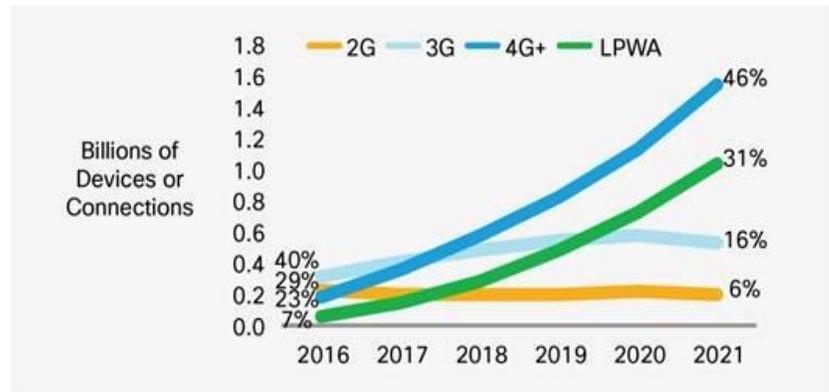


The short interest has decreased in the beginning of the first quarter of 2018, however, analyzing the chart, illustrates that it is starting to increase again. This could be due to speculation of the price appreciating. The short interest was highest at 27.45, while it was lowest at 20.41. With an increasing short interest, this implies that investors are anticipating that the stock price is going to decrease.

Industry:

A driver of the forecasted increased EBITDA margin for Iridium is that the space industry is witnessing unprecedented investment as new competition in the launch industry is reducing the cost to get to space, and satellites are getting smaller and more affordable. With this, it will make the cost to fly and repair satellites in space much cheaper. However, I believe investors are skeptical of this idea because spaceship launches require significant amounts of capital and have a high risk of failure. The failure of a SpaceX rocket explosion put pressure on Iridium back in 2016 and Iridium had to replace its satellites that were destroyed in the explosion. While this is a concern and a risk for Iridium, technology only continues to become more and more reliable. Therefore, the risk of this happening again, is a risk that progressively decreases every year as new improvements and breakthroughs are revealed in the space industry.

The demand for this industry is continuously increasing and has no reason to stop. According to a 2017 study by the GSM Association, total mobile connections reached 7.9 billion throughout the world as of the end of 2016 and are projected to reach 9.7 billion by 2020. With Iridium increasing their capacity, they will have the ability to provide connection to future customers.



I believe that the mobile satellite services industry will continue to experience growth driven by the increasing awareness of the need for reliable mobile voice and data communications services, the lack of coverage by terrestrial wireless systems of most of the earth's surface, and the continued development of innovative, lower cost technology, applications integrating mobile satellite products and services and the continued development of the IoT. Only satellite providers can offer global coverage, and the satellite industry is characterized by significant financial, technological and regulatory barriers to entry. One thing that does limit Iridium's growth is the regulation laws in other countries. Some countries have certain laws that could restrict Iridium's ability to provide their services.

Iridium's operations and performance depend significantly on worldwide economic conditions. Uncertainty about global economic conditions poses a risk as individual consumers, businesses and governments may postpone spending in response to tighter credit, negative financial news, declines in income or asset values, or budgetary constraints. Reduced demand would cause a decline in their revenue and make it more difficult for them to operate profitably, potentially compromising our ability to pursue their business plan. While they expect the number of our subscribers and revenue to continue to grow, they expect the future growth rate will be slower than our historical growth and may not continue in every quarter of every year. They expect their future growth rate will be affected by the condition of the global economy, increased competition, maturation of the satellite communications industry, and the difficulty in sustaining high growth rates as they increase in size. In addition, any substantial appreciation of the U.S. dollar may also negatively affect their growth by increasing the cost of their products and services in foreign countries.

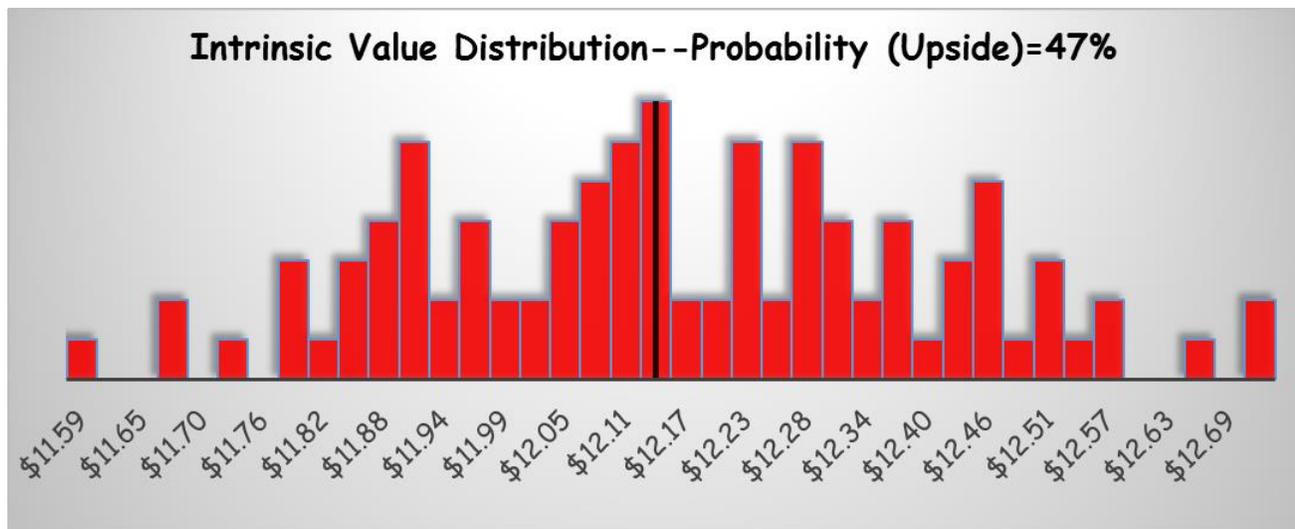
Profitability Comparison:

While Iridium may offer more distinct services and may not have a competitor that matches them accurately, they sell products and services that are similar to other companies in the communications equipment industry. Looking at the company's EBITA and Net Margin compared to their competitors, displays how they are significantly outperforming them. For the LTM, Iridium has had an EBITA Margin at 27.6%, which is 12.1% higher than their competitors at 15.5%. The company's Net Margin is over 3x higher than their competitors, implying that they are generating more cash more efficiently. In addition, Iridium's ROIC in the LTM is higher than their competitors at 3.5% compared to -0.9%. Iridium's WACC for the LTM was at 2.5%, while their competitor's WACC was at 10.7%. The ROIC/WACC for Iridium in the past LTM is 1.42, which implies that they are creating value. The industry ROIC/WACC in the past LTM was at -0.375%.

COMMON SIZE VIEW				
	6-year Historical Median		Last 12 Months	
	IRDM	Competitors	IRDM	Competitors
COR/Rev	27.3%	45.6%	27.6%	45.1%
(SGA+Other)/Rev	21.1%	38.7%	21.3%	39.4%
DPR/Rev	15.9%		23.5%	0.0%
EBITA Margin	35.7%	15.6%	27.6%	15.5%
Interest exp/Rev	6.2%	10.7%	18.6%	11.3%
AMORT/Rev	1.7%		0.3%	0.0%
SBC/REV	2.5%		3.4%	0.0%
Other Non-Operating Exp/Rev	4.6%	9.3%	-39.8%	-1.9%
Taxes/Rev	5.0%	-6.8%	10.2%	-4.5%
Net Margin	15.8%	2.4%	34.8%	10.7%
Cash/Capital	9.9%	17.2%	12.6%	-11%
NWC/Capital	-0.5%	39.1%	-0.5%	27%
Operating Assets/Capital	88.4%	27.9%	87.9%	60%
Goodwill/Capital	2.1%	15.9%	0.0%	23%
Debt/Capital	50.6%	61.7%	55.5%	58%
Other Claims/Capital	3.1%	8.2%	0.0%	0%
Book Value/Capital	46.3%	30.1%	44.5%	42.4%

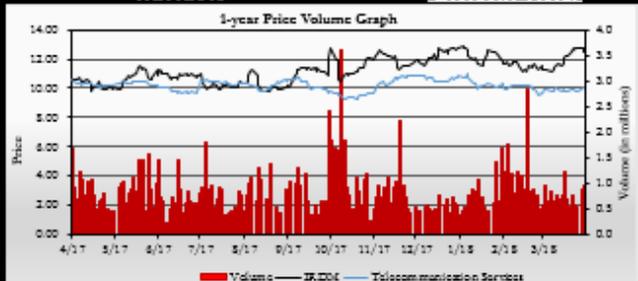
Valuation:

To value a price, I used a valuation that involves a Monte Carlo simulation. For my Rev/Opex, I used 50%, which was based off the company's base year assumption and a conservative estimate. Since the Iridium NEXT project is occurring, capex was increased to match the base year assumption and its historical average at 93.81%. The cost of debt was 5%, while the equity risk premium was at 6.5%. For the expected revenue growth, I used 8%, which seemed reasonable based off of the company's historical growth plus their new initiatives. I came to a target price of \$15.09 with a percentage return of 24.17% and a 47% upside. While this investment presents risk, I believe the upside is greater than the downside. In a bullish scenario, where the Rev/Opex decreases 1% and revenue grows at 3%, the new target price would be \$17.22 with a 41.17% return and a 100% upside. For the revenue increase of 3%, this was estimated based off the idea that the economy would continue to do well and remain bullish as it's been in the past couple years. In a bearish scenario, where Rev/Opex increase 1% and revenue grows at only 5%, I came to a target price of \$12.92 with a 5.77% return. This was based off the idea that the economy would take a downturn, which would adversely affect Iridium's revenue growth.



Summary:

In conclusion, I believe Iridium's stock price is undervalued due to their robust revenue growth, increasing margins, and because of substantial projected demand for their services and products. With the implementation of the Iridium NEXT project, they will have the ability and capacity to handle a growing demand for mobile connection services. In addition, Iridium outperforms their competitors in EBITA, Net Margin, and ROIC/WACC, which are three important factors to the profitability and value creation of a company. With a target price of \$15.09 and a return of 24.17%, I believe Iridium is a buy at its current price and has the potential to break its 52 week high.

Iridium Communications Inc.
CENTER FOR GLOBAL FINANCIAL STUDIES
BULLISH
(IRDM)
Analysis by Al Capone
Current Price:
\$12.15
Intrinsic Value:
\$12.07
Target 1 year Return: 24.17%
4/27/2018
Dividend Yield:
0.0%
Target Price:
\$15.09
Probability of Price Increase: 47%


Description	
Iridium Communications Inc. provides mobile voice and data communications services through satellite to businesses, the U.S. and foreign governments, non-governmental organizations, and consumers worldwide.	
General Information	
Sector	Telecommunication Services
Industry	Diversified Telecommunication Services
Last Guidance	February 12, 2018
Next earnings date	July 27, 2018
Market Assumptions	
Estimated Equity Risk Premium	6.54%
Effective Tax rate	23%

Market Data	
Market Capitalization	\$1,341.08
Daily volume (mil)	0.75
Shares outstanding (mil)	110.38
Diluted shares outstanding (mil)	122.62
% shares held by institutions	109%
% shares held by investment Managers	86%
% shares held by hedge funds	2%
% shares held by insiders	13.23%
Short interest	17.84%
Days to cover short interest	25.05
52-week high	\$13.25
52-week low	\$9.68
Volatility	37.77%

Quarter ending	Revenue	EBITDA
3/31/2017	-1.29%	-10.55%
6/30/2017	1.60%	-11.29%
9/30/2017	2.54%	-9.13%
12/31/2017	3.88%	-20.30%
3/31/2018	6.58%	-10.83%
Mean	2.66%	-12.42%
Standard error	1.0%	4.3%

Market and Credit Scores	
Recommendation (STARS) Value	--0
Recommendation (STARS) Description	--0
Quality Ranking Value	--0
Quality Ranking Description	--0
Short Score	--5
Market Signal Probability of Default % (Non-Rating)	--0.922%
Credit Model Score (Non-Rating)	--bbb-

Industry and Segment Information	
LTM Revenue by Geographic Segment	LTM Revenue by Business Segments
United States--51%	Providing Global Satellite Communications Services
Canada--10%	--
United Kingdom--10%	--
Other Countries--29%	--

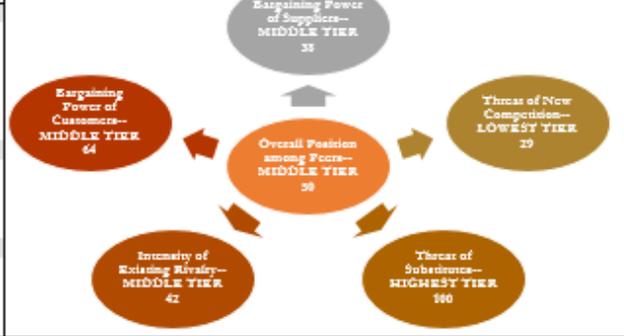
Management	Position	Total Compensation Growth	Stock Price Growth During Tenure
Dorch, Matthew	CEO & Director	10.9% per annum over 5y	0.81% per annum over 5y
Fitzpatrick, Thamar	Chief Administrative Officer, CFO & Director	10.76% per annum over 5y	0.81% per annum over 5y
Smith, S.	COO & Director	11.6% per annum over 5y	0.81% per annum over 5y
Hickey, Thamar	Chief Legal Officer & Secretary	5.93% per annum over 4y	11.95% per annum over 4y
Hartin, Bryan	Executive Vice President of Sales & Marketing	4.39% per annum over 4y	11.95% per annum over 4y
Levy, Kenneth	Vice President of Investor Relations		

Profitability	IRDM (LTM)	IRDM Historical	Pearl's Median (LTM)
Return on Capital (GAAP)	3.5%	5.49%	-0.94%
Operating Margin	28%	35.73%	15.55%
Revenue/Capital (GAAP)	0.13	0.15	-0.06
ROE (GAAP)	11.3%	7.5%	40.9%
Net margin	34.8%	20.4%	1.5%
Revenue/Book Value (GAAP)	0.33	0.37	27.64

Peer's 5 forces (Scores are percentiles)	
Eargaining Power of Suppliers-- MIDDLE TIER	35
Threat of New Competitors-- LOWEST TIER	19
Intensity of Existing Rivalry-- MIDDLE TIER	42
Threat of Substitution-- HIGHEST TIER	100
Overall Position among Peers-- MIDDLE TIER	38
Eargaining Power of Customers-- MIDDLE TIER	64

Invested Funds	IRDM (LTM)	IRDM Historical	Pearl's Median (LTM)
Cash/Capital	12.6%	9.9%	-10.9%
NWC/Capital	-0.5%	-0.5%	27.0%
Operating Assets/Capital	87.9%	88.4%	60.5%
Goodwill/Capital	0.0%	2.1%	23.4%

Capital Structure	IRDM (LTM)	IRDM Historical	Pearl's Median (LTM)
Total Debt/Market Capitalization	0.55	0.51	0.58
Cost of Debt	0.0%	6.0%	7.6%
CGFS Rating (F-rcare, Z-rcare, and default Probability): BB			
WACC	12.8%	7.6%	10.7%



Forecast Assumptions	Explicit Period (5 years)	Continuing Period
Revenue Growth CAGR	11%	2%
Average Operating Margin	49%	50%
Average Net Margin	-3%	0%
Growth in Capital CAGR	9%	2%
Growth in Claims CAGR	11%	2%
Average Return on Capital	4%	4%
Average Return on Equity	-1%	0%
Average Cost of Capital	6%	5%
Average Cost of Equity	12%	12%

